



**UNIVERSIDAD
CATÓLICA DE CÓRDOBA**

Universidad Jesuita

Máster Plan Polo Tecnológico y Diseño de un Edificio Componente

Cátedra Trabajo Final – Ingeniería Civil

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*A nuestros profesores,
a nuestras familias y a nuestros amigos.*

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RESUMEN

En el presente informe, realizado en el marco del Trabajo Final de los estudios de grado de Ingeniería Civil, se presenta la proyección del Master plan de un Polo Tecnológico, ubicado en terrenos pertenecientes a la Universidad Católica de Córdoba, dentro del ejido municipal de la Ciudad de Córdoba, y el desarrollo de uno de los edificios componentes. Este edificio se diseña con el objetivo de albergar empresas o start-ups (empresas creadas recientemente que parten de una idea innovadora, asociadas en general al desarrollo tecnológico) relacionadas con las TIC's (tecnologías de la información y la comunicación).

A lo largo de este trabajo se analizan tanto aspectos de diseño como técnicos y ambientales. Se desarrollan trabajos sobre la zonificación del predio, tomando como base normativas vigentes, aspectos de eficiencia y sustentabilidad a la hora del diseño, trabajando en la afectación tanto del cambio de uso de suelo y asentamientos aledaños debido al loteo del polo. Para llevar a cabo lo mencionado se utilizaron, por un lado, programas con tecnologías del tipo BIM para diseño como Revit Architecture, CYPE y AutoCAD y por otro QGIS y herramientas de Google Earth para obtener características del terreno.

Palabras Clave: Master plan, polo tecnológico, industria, educación, zonificación, impacto ambiental, UCC, mitigación, energías renovables, sustentabilidad, estructuras, diseño.

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ABSTRACT

In the following report, corresponding to the Final Workshop from the professional career of Civil Engineer, there has been developed a complete Master Plan project for a technopole located within the lands of the Catholic University of Córdoba in Argentina. Furthermore, one of its buildings, specifically destined for ICT industry (Information and Communication Technology), is designed from both architectural and structural point of view.

Throughout the whole report, many aspects were analyzed, including design, technical and environmental issues. The zoning is one of the main jobs in the analysis, taking into account the corresponding laws and regulations in force, efficiency aspects and sustainability of design. To achieve these goals, different tools were used such as BIM for design, as well as Revit Architecture and AutoCAD, also QGIS and Google Earth were helpful for understanding the characteristics of the land.

Key Words: Master plan, technopole, ICT, industry, education, zoning, environmental impact, UCC, mitigation, renewable energies, sustainability, structure, design.

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I. - INTRODUCCIÓN

Actualmente la Universidad Católica de Córdoba ubica su campus en un terreno emplazado sobre la Av. Armada Argentina al 3555, Ciudad de Córdoba. El mismo ocupa una superficie de 79 [ha] de las cuales aproximadamente la mitad es utilizada por la universidad.

En contacto con vicerrectorado de medios universitarios y con intención de aprovechar el 100% de los recursos de la Universidad, el fin de este trabajo es destinar la superficie restante del terreno a un Polo-Tecnológico.

El mismo consta de edificios para que empresas de los diversos rubros productivos (industrias, construcción, TIC's, etc.) instalen sus sectores de I+D (investigación y desarrollo). Así mismo, la relación e intercambio Empresa-Universidad, se profundiza manteniendo una sinergia entre miembros de dichas empresas, profesores y alumnos, donde tanto las instalaciones, instrumentales y maquinarias necesarias para la investigación (que proveen las empresas) como los medios intelectuales (que provee la universidad), pueden ser aprovechados para mutuo crecimiento. Esto beneficiaría a ambas partes, obteniendo investigación con profesionales y teniendo próxima a la nueva fuerza laboral (alumnos).

Además, se respetarán las zonas verdes denominadas "bosque nativo", se preverán zonas de producción de energías renovables para cubrir parte del consumo energético del polo, sectores de uso común con puestos gastronómicos y recreativos y un centro de convenciones.

La intención no es crear una zona estudiantil y una laboral sino integrar todo bajo los valores, la visión y misión que promulga la Universidad Católica de Córdoba.

El objetivo de este trabajo final es en primer lugar diseñar un master plan del proyecto completo, sectorizando el terreno para que cumpla tanto con la normativa como con la funcionalidad buscada en este espacio. En segundo lugar, se busca diseñar estructural y arquitectónicamente un edificio componente del complejo, más específicamente uno enfocado al área de la TIC's, la cual es la industria de mayor crecimiento en el mundo actual.

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I. 1. - OBJETIVOS

I. 1. 1. - OBJETIVOS GENERALES

- Desarrollar un ante proyecto avanzado de Polo Tecnológico, zonificando los sectores entre producción, alimentación e informática para la investigación y desarrollo, sectores de energía renovable y sectores verdes respetando el bosque nativo.
- Diseñar a nivel arquitectónico y estructural uno de los edificios del Polo Tecnológico correspondiente al área de las TIC's.
- Aplicar interdisciplinariamente los conocimientos adquiridos a lo largo del cursado de las distintas asignaturas de la carrera de Ingeniería Civil de la Facultad de Ingeniería de la Universidad Católica de Córdoba.

I. 1. 2. - OBJETIVOS PARTICULARES

- Profundizar los conocimientos adquiridos en las asignaturas de “Planeamiento y Urbanismo” en lo referente a zonificación, normativas vigentes, criterios de diseño e influencia en áreas circundantes.
- Profundizar los conocimientos adquiridos en la materia “Diseño Arquitectónico” en lo referido a diseño de espacios, tanto exteriores como interiores.
- Profundizar los conocimientos adquiridos en la materia de “Gestión ambiental” en lo referido a energías renovables, eficiencia energética en las construcciones civiles y la reducción del impacto hidrológico.
- Profundizar los conocimientos adquiridos en las distintas cátedras de “Análisis y Cálculo Estructural” en relación al diseño estructural de edificios y pre-dimensionado de piezas estructurales.
- Realizar un proyecto acorde a las necesidades del mercado y aprovechando los recursos de la Universidad Católica de Córdoba.
- Producir un reglamento propio del Polo Tecnológico, al cual todos los edificios y diseños estarán sujetos.
- Lograr una distribución modular de los espacios interiores para permitir el mejor aprovechamiento de espacios, así como modificaciones sencillas.
- Aplicar los conocimientos adquiridos en clases y capacitaciones sobre distintos softwares como AutoCAD, Revit Architecture, QGIS, AutoCAD-Civil 3D, Adobe Illustrator y Excel.
- Realizar de manera integral el proyecto de una obra de ingeniería.
- Completar los requisitos necesarios para culminar la carrera de Ingeniería Civil y alcanzar el título de Ingeniero Civil.

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I. 2. - ALCANCE Y VISIÓN DE METAS

El presente trabajo tiene como alcance realizar un desarrollo de zonificación del futuro parque tecnológico, focalizándonos en garantizar la optimización de recursos y espacios disponibles, la preservación de la fauna y flora y la sustentabilidad del mismo.

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II. - MASTER PLAN

II. 1. - MARCO TEÓRICO

Para la elaboración del presente trabajo se aplicaron los conocimientos adquiridos en diferentes materias a lo largo del cursado de la carrera de Ingeniería Civil.

Por un lado, se recurrió a conceptos de planificación estratégica, interpretación, criterio y redacción de normativas, aplicación de metodologías, etc. Por otro lado, se llevaron a cabo trabajos basados en conceptos técnicos.

En esta sección, se revisan conceptos relacionados al tema en cuestión para entender en su totalidad el proyecto.

II. 1. 1. - POLO TECNOLÓGICO

i) Definición

Un polo tecnológico, tecnopolo o tecnópolis es un conjunto de industrias y empresas tecnológicas, generalmente acompañadas de instituciones educativas y de investigación, situadas en una ubicación física común. Se rigen por la conjunción de tres ejes principales: empleo, capacitación e investigación y desarrollo (I+D). Estos tipos de parques, son organismos gestionados por especialistas cuyo principal fin es incrementar la riqueza de su comunidad por la promoción de la cultura y la innovación, así como la competitividad de sus empresas e instituciones fundadas en el saber que se le asocian o se crean en su entorno.

Sin embargo, el concepto pronto se amplía a una operación mixta de actividades económicas, zonas residenciales y equipamientos, en donde la simple atracción de empresas es considerada como uno de los objetivos y funciones para la innovación desde estos nuevos espacios. Así, los proyectos contenían toda una estrategia de promoción económica, industrial, inmobiliaria e incluso social.

Dentro de las diferentes dinámicas metropolitanas y tecnopolitanas, uno de los instrumentos con el que se ha trabajado para concentrar, desarrollar y difundir tecnología a partir de conocimientos, ha sido la creación de parques científicos y tecnológicos, potenciando los procesos de innovación mediante sinergias entre instituciones científicas y las necesidades de los sectores productivos.

Originados en los EE. UU, después en Europa y posteriormente en el sudeste asiático, es en estos espacios productivos donde se crean nuevas estructuras científicas y socioeconómicas apoyadas en el conocimiento, en las ideas y en la cooperación entre los entornos institucional, académico y productivo.

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ii) Objetivo de los Polos Tecnológicos

Su principal objetivo es acercar la universidad, la investigación y la industria para fomentar el desarrollo de soluciones locales con tecnología de punta, tanto ofreciendo nuevos profesionales a las industrias, como generando fuentes de trabajo para el capital humano egresado y por egresar de las entidades educativas. Para cumplir ese fin, los parques científicos y tecnológicos deben estimular y gestionar la transferencia tecnológica y de conocimientos entre universidades, empresas y mercados, junto con otras instituciones de I+D. De esta manera se facilita la creación y crecimiento de compañías innovadoras como incubadoras de empresas, ofreciendo otros servicios de valor añadido, además de espacios e instalaciones de alta calidad.

iii) Historia

Es prácticamente imposible hablar de la historia de los parques tecnológicos sin relacionarla directamente con la experiencia del Silicon Valley. Allí, y durante varias décadas, la colaboración entre empresas, organizaciones militares, universidades, departamentos del gobierno norteamericano y entidades financieras, fueron los agentes imprescindibles para crear un tejido empresarial, social y de investigación, que posibilitó un rápido avance tecnológico.

Una serie de avances tecnológicos y científicos convergentes surgidos décadas atrás, cristalizaron por los años '70 en Estados Unidos en grandes innovaciones tecnológicas en los sectores de la electrónica, informática, ordenadores y satélites espaciales. En estas actividades las nuevas empresas creadas y otras ya existentes reorientadas, se localizaron en nuevos espacios industriales denominados en principio parques tecnológicos.

Según Julio César Ondátegui en *"Parques Científicos y Tecnológicos: los nuevos espacios productivos del futuro"*, estos fueron tan innovadores que los parques posiblemente no existirían sin la universidad de Stanford, que con sus graduados favoreció la implantación de empresas en su campus. Además, éstas generaron startups a partir de procesos de división de las mismas, fueron apoyadas por un mercado de capitales que facilitó la innovación y el desarrollo empresarial. Es decir, que, en la orientación del nuevo desarrollo tecnológico, sin una planificación que incluya aspectos sociales, culturales, económicos, etc., y sin una estrategia de apoyo y estímulo al tejido, no se asegura el crecimiento endógeno y competitivo. Siempre teniendo en cuenta que entre los centros de investigación se incluyen aquellos pertenecientes a grandes empresas tecnológicamente avanzadas o aquellos otros especializados en líneas de investigación. En este sentido los estudios de los parques coinciden en varios aspectos relacionados con los agentes impulsores.

Ahora bien, conviene hacer una precisión sobre los acontecimientos causales de lo que se considera el germen de los primeros espacios innovadores, a partir de la cual se establecen diferencias iniciales. Tanto el Silicon Valley como el área de Boston, guardan estrecha relación con la reindustrialización, el cambio tecnológico en la industria de guerra y ciertas instituciones como la universidad de Stanford y el MIT. A continuación, se presentan los acontecimientos que subyacen en el desarrollo de los complejos de alta tecnología en los EE. UU:

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— El eje de la investigación avanzada en electrónica fueron el MIT y la universidad de Harvard en menor medida.

— El Departamento de Defensa prestó los fondos y sobre todo los pedidos de bienes equipos y servicios industriales.

— Los conocimientos avanzados y los contactos con el ejército para crear empresas se aportaron a través de los docentes de la universidad y los graduados del MIT.

— La falta de competencia mundial durante los años 1940 y 1950 en la tecnología electrónica provocó la escisión de empresas dando nacimiento a los complejos tecnológicos y a las economías de escala favorecidas por una mano de obra de alta calidad fruto de la buena formación y de la tradición industrial. (SAXENIAN, A., 1990; CASTELLS, M.; HALL, P., 1994).

Los parques fueron conocidos fuera de los valles californianos hasta el punto que en todo el mundo se ha querido reproducir el fenómeno, pero, como los procesos fueron de tipo múltiple y específicos de un lugar, la adaptación del fenómeno a las distintas regiones se ha producido de forma parcial.

La experiencia del Silicon Valley en sus distintas manifestaciones ha dado lugar a la planificación de PCyT. Países, regiones, municipios, universidades, fundaciones y empresarios han intentado copiar los procesos que allí se produjeron. Existen experiencias a escala mundial del fenómeno con diferentes resultados.

iv) Polos Tecnológicos en el mundo.

El origen del término “Parque Tecnológico” se remonta a la creación del parque industrial de Stanford, Estados Unidos. Este fue ideado por el visionario decano de ingeniería eléctrica Frederick Terman, y uno de los inventores del transistor en 1948, quienes, tras formar parte del cuerpo docente de Stanford, proporcionaron el impulso para desarrollar el Silicon Valley. Este fenómeno, que surgió en Palo Alto en el valle de Santa Clara (California), puso en auge la vitalidad del valle a lo largo del tiempo. Se creaba una nueva empresa cada dos semanas durante los años ‘70. Seguidamente, las redes sociales de información entre los directivos, empresarios e ingenieros, entraron en una competencia directa por el negocio de la innovación tecnológica. Estas sinergias continuaron escindiendo y segregando a otros grupos sociales y a otras actividades económicas creando múltiples parques industriales en el área geográfica inmediata: Mountain View, Sunnyvale, San José, Cupertino.

Así nació este complejo industrial, mediante una concentración de conocimientos en un país capaz de mitificar un área geográfica con la tecnología. Los parques estadounidenses están ligados a sectores tecnológicos emergentes que aprovechan la capacidad científica e innovadora de la universidad a la que están asociados, atraen nuevas inversiones y empresas «high tech» convirtiéndose de manera espontánea en importantes instrumentos de desarrollo regional. Otro elemento interesante del modelo norteamericano es la vocación de autofinanciación de los parques, a veces incluso proporcionando beneficios a sus promotores. Para ello parten

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normalmente de un planteamiento empresarial, lo que excluye habitualmente el que acaben dependiendo de fondos públicos como ocurre en otros países.

En EE.UU., la mayor concentración de empresas de alta tecnología está dentro o cerca de un parque científico, y, en cualquier caso, próximas a universidades o centros de investigación. A los clásicos ejemplos del Silicon Valley en el área de San Francisco, se han sumado diversas áreas innovadoras de excelencia como son: Seattle, Philadelphia y Massachusetts.

Finalmente, destacar la enorme importancia que prestan en la creación de «start ups» (empresas de nueva creación) y «spin offs» (nuevas empresas resultado de una actividad realizada en un centro universitario o en otra empresa).

Los estados que pueden considerarse líderes por la importancia que en ellos tienen los parques, atendiendo al número de personas que emplean son California y Carolina del Norte con cerca de 60.000 cada uno, Nueva York con unos 27.000 y Alabama con 25.000 empleos.

Si nos remontamos a Europa, veremos que el panorama difiere en algunos aspectos. Aunque los gobiernos desempeñan un papel fundamental en la creación de los parques científicos, en todos los países no lo hacen de la misma manera. El nacimiento de parques en el norte de Europa ha sido y es una de las vías importantes que la universidad eligió para rentabilizar el conocimiento, y para dar soporte al desarrollo de la sociedad de la información.

Además de centros o ciudades innovadoras tradicionales donde se concentran funciones políticas, productivas y tecnológicas como Londres, la Ciudad Científica de París o el área de Múnich en Baviera, podemos añadir ciudades medias especializadas en la industria aeronáutica como es el caso de Toulouse y algunos ejemplos pioneros como el Cambridge Scientific Park.

La rápida proliferación de los PCyT se da en la década de los años '80 por iniciativa de las universidades, con el objetivo de transformar sus conocimientos científicos y tecnológicos en riqueza económica. Concretamente es en el norte de Europa, en Escocia, Holanda, Inglaterra y Suecia. Curiosamente, en uno de ellos, el Roslin Institute Edinburg Technopole, es donde ha nacido Dolly la primera oveja clónica.

En cuanto a la estructura y financiación, estos parques se encuentran normalmente estructurados en forma de sociedades limitadas o anónimas o como fundaciones. En los consejos rectores de los parques o de otras sociedades asociadas a ellos se encuentran representadas las universidades, las administraciones locales y regionales, las empresas, y los bancos y entidades financieras.

La creación de estos espacios generalmente tiene una repercusión directa sobre el territorio donde se ubican, ayudando a revitalizar las ciudades ya se encuentren en una etapa de estabilidad económica o bien con problemas económicos puntuales.

El Reino Unido siguiendo el ejemplo americano desarrolla sus parques tecnológicos tomando la universidad como motor. Los parques de ciencia como Herriot Watt Science en Edimburgo y Cambridge Science Park son los primeros ejemplos de éxito que acuñan el término de parques científicos en los años setenta. Cambridge data de los años 1970, y fue una iniciativa semiespontánea debida a escisiones de la universidad con un desarrollo de tipo productivo inicialmente lento. Posteriormente, debido a la escasa participación de la iniciativa privada, el

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poco empleo generado y los débiles resultados, comienza una segunda oleada de parques que dan prioridad a la creación de empresas innovadoras en incubadoras movilizand o capital riesgo.

Este entorno económico por el que la participación de empresas del sector privado en la administración de los parques, en muchas ocasiones, asegura un buen funcionamiento y estos se convierten en una garantía para algunas empresas.

En Francia son agencias públicas y centros regionales de investigación, quienes siembran las regiones y las ciudades de espacios para la innovación y tecno polos, intentando reducir las desventajas respecto a los principales polos de investigación científica y tecnológica tradicionales concentrados en la región Ile de France. Utilizando la tecnología y sus propios recursos con el objetivo de «ponerlos en valor», se definen los modelos de tecnópolis o tecnopolos y son las ciudades y los ayuntamientos los que asumen el protagonismo para crear «polos de excelencia». El fenómeno francés persigue el crecimiento de pequeñas ciudades medianas en áreas no metropolitanas con el crecimiento de nuevas funciones de tipo avanzado. Este es el caso de las ciudades del sur de Francia, y en particular el mayor activismo local de Lyon, o Grenoble, e incluso en la misma franja están Montpellier, Tolouse y la ciudad nueva de Sophía Antópolis.

A partir de experiencias como en la Costa Azul, cuyo impulso inicial corresponde a una escuela pública con el activismo de las autoridades locales y la ayuda posterior del gobierno central y de empresas nacionales, surgieron los tecnopolos que, en general, ya no se limitan a gestionar una única área donde se concentran las actividades de alta tecnología, sino que, coordinan varias zonas de una misma ciudad (Burdeos, Toulouse, Rennes, Montpellier). Montpellier-Europole, por ejemplo, integra cinco polos especializados: Euromedicine ligado a la sanidad, Agropolis especializado en los recursos de la tierra, Anntena en multimedia, Communicatque en informática y robótica, y, finalmente, Heliopolis en turismo y actividades recreativas. En el modelo francés que persigue ciudades de técnicos y cuadros, se ha intentado descentralizar actividades avanzadas de alta tecnología apoyadas en empresas y centros de investigación públicos, con una composición de la población que va adquiriendo un panorama social y profesional mixto.

En Alemania, ocupan un lugar preferente los Centros de Transferencia de Tecnología. Además de los CEIs, como política de innovación establecida a principios de 1980 destaca el BIC de Berlín del que surgen varios parques tecnológicos. Estructuras directamente vinculadas al gobierno han convertido al land de Baden-Württemberg con más de cien centros en el mayor polo de transferencia tecnológica interna en Alemania. En las experiencias con buenos resultados predomina una interacción entre Centros Tecnológicos y Parques Tecnológicos.

Italia es un territorio sembrado de iniciativas para impulsar la innovación y el desarrollo tecnológico mediante PCyT. El gobierno italiano a finales de los años '80 inició un programa para reproducir la idea de Bari financiada por la Cassa del Mezzogiorno. Actualmente existen iniciativas en curso como el entorno innovador Tecnocity en el triángulo Turín-Ivrea-Novara, el polo tecnológico Bicocca en Milán, Leonardia en Píenza, etc.

Uno de los parques más antiguos es Tecnópolis Novus Ortus, en Bari, que concentra potentes centros de investigación propios y de grandes empresas en un espacio muy reducido. En 1994 contaba con 230 empleos propios, en su mayoría investigadores, lo que puede ser un hecho

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atípico pues este personal incluidos técnicos no suelen pasar del 40% ó 50%. Este parque marca tendencias diferentes: por un lado, el personal de gestión tiende a reducirse al mínimo y, por otro, los nuevos proyectos del sur deberán producir resultados útiles a la industria y en general a la economía local en la medida que no está previsto financiar investigación básica.

Dentro de la Península Ibérica, en España, son los gobiernos regionales y en Portugal, fundamentalmente es el Estado, quienes están desarrollando los parques científicos y tecnológicos. Portugal tiene planificados proyectos en Coimbra a partir de la evolución las actividades de innovación que realizan una docena de empresas localizadas en la incubadora de Empresas del Instituto Pedro Nunes. En el área de Lisboa se localiza el parque de ciencia y tecnología (TAGUSPARK) y, en principio, en los mismos términos, pero con un carácter más inmobiliario, el de Oporto con tres polos localizados en Feira, Maia, e Vale do Ave, con unos 400 empleos previstos en 1997 dispuestos a competir con Lisboa.

En el continente asiático, también se dio el fenómeno de nacimiento de PCyT. Al margen de la emergencia de un sector orientado a la tecnología en la India y de las planificadas nuevas áreas industriales en la extensa costa de China, nuevas ciudades asiáticas que habían adquirido funciones centrales de producción en los años '80, ahora están concentrando además de las tareas de ensamblaje estandarizadas, actividades de producción avanzada con mayor cualificación.

El tan conocido como desconocido archipiélago japonés contaba en ese tiempo con 20 ciudades definidas en donde se localizaban experiencias de parques científicos y tecnológicos. Actualmente, con una planificación sensiblemente diferente al modelo europeo se fomentan e impulsan iniciativas similares en 30 ciudades.

Desde 1992 estas “fábricas de información para el mañana” iniciadas en la tecnópolis de Gifu, localizada en el interior de la isla principal, se han extendido por media docena de prefecturas. Las ciudades medias y pequeñas están modificando la planificación y la base económica mediante la combinación de servicios e industria nueva ligada a la agrobiología, pequeñas unidades de I+D en productos alimenticios, textil, moda, papel y electrónica.

En Singapur, como en Japón, el microprocesador se aplica en las carreteras, aeropuertos, ingeniería civil y vigilancia de presos. La alta demanda del mismo hace que en este pequeño territorio con una población que dobla al censo de las Islas Canarias sea una verdadera tecnópolis por las rápidas soluciones que suceden a las necesidades de la población. La reproducción del Silicon Valley en Singapur se apoya en la confluencia de redes de empresas de alta tecnología como Conner Peripherals, Hewelet Packard y Thomson-SGS, que descentralizaron actividades a finales de estos años.

Durante los años '90 se destaca por su industria de alta tecnología (reparación de aviones, equipos electrónicos y servicios avanzados) que constituyen el 75% del PIB y del sector servicios. Su puerto con excelentes instalaciones para el tráfico de contenedores, reexporta productos refinados del petróleo para los países del área y bienes de equipo para todo el mundo. Este país es todo un parque tecnológico. Desde 1998 el gobierno trabaja en un plan para crear una ciudad futurista mediante el programa Singapore One: un “superpasillo” multimedia2 que conectará a los

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hogares, escuelas y empresas mediante la oferta de servicios. En este proyecto se invierten 60.000 millones de pesetas al año para vincular toda la población en el año 2002 con tecnología avanzada.

En Taiwan, el parque tecnológico de Hsin-Chu es uno de los principales focos proveedores de equipos y componentes electrónicos e informáticos del mundo. En este silicon taiwanés que a finales de 1999 daba empleo a más de 60.000 personas se concentra la alta tecnología del pequeño país asiático. En él están localizados centros tecnológicos públicos y plantas de empresas como Taiwan Semiconductor Manufacturing especializada en memorias DRAM con tecnología de 0,15 a 0,25 micras, Acer uno de los mayores productores de ordenadores del mundo, United Microelectrónica Group con seis fábricas de microprocesadores en el parque, y la compañía Microtek Intenacional, especializada en equipos electrónicos para impresión con una cota del 12% en el mercado mundial en escáneres.

En Rusia el concepto de parque es muy reciente, concretamente de 1988. La Universidad de Moscú fue una de las primeras en tener la iniciativa, seguida de la de San Petersburgo. Inicialmente el Ministerio de Educación planeó la construcción de 50 «tecnoparques», de los que el 90% nunca pasaron de la fase de diseño debido a restricciones presupuestarias y a cambios en las prioridades. Actualmente, la IASP maneja unos 26 parques que proporcionan espacio y servicios.

También surgieron en otras partes del mundo. El fenómeno se ha extendido por Israel y África donde en el año 2000 había una docena de proyectos en marcha. En América del Sur el concepto de parque surge a finales de los años 80 y principios de los 90. También en Australia el desarrollo de parques científicos o tecnológicos es un fenómeno relativamente reciente. Los principales parques son: el Technology Park Western Australia, el Technology Park de Adelaida, sólo el Brisbane Technology Park, y el Queensland and University of Adelaide Commerce and Research Precint.

v) Parques Tecnológicos en América Latina y Argentina.

Está comprobado: el desarrollo conjunto de empresas de base tecnológica representa para los países la mejor oportunidad de profundizar un perfil innovador, sumar una actividad de significativo valor económico, potenciar la investigación científica y crear climas que invitan a nuevos emprendimientos. En ese contexto, parques y polos tecnológicos prosperan por América Latina con rapidez, ya que se trata, según los expertos, de los pasos pendientes para alcanzar el tan deseado desarrollo de los países que forman esta región del planeta.

En América Latina también hay casos para destacar, particularmente en Argentina.

El primer “cluster” o grupo de empresas de tecnología que se agruparon en una misma región del país fue el de Córdoba, a principios de los 90, donde conviven y trabajan con el polo académico que reúne a las principales universidades públicas y privadas con actividad en esa provincia. Desde entonces surgieron distintas iniciativas, a las que se denominaron polos tecnológicos. Dos de los más antiguos son el polo de Rosario, con actividad conjunta entre empresas, gobierno y la universidad, y el de Tandil, que funciona en la sede de la Universidad

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Nacional del Centro. Pero además surgieron proyectos denominados polos tecnológicos en distintos municipios, desde el Polo Constituyentes hasta el compromiso de Telefónica de Argentina de financiar “clusters” en General Pico (La Pampa) e Iguazú (Misiones). Sin duda, el desafío trasandino ya está en su proceso de maduración.

En este país, los Polos Tecnológicos se dedican particularmente al área de las TIC’s.

Brasil también tiene mucho que decir. Este país cuenta en la actualidad con 35 parques tecnológicos y 207 centros de desarrollo de incubadoras. Las actividades se canalizan a través de la Asociación Nacional de Entidades Promotoras de Emprendimiento de tecnología avanzada, quien desarrolla un trabajo conjunto con las universidades, sector privado y más de 200 municipios de toda la nación. Durante el año la entidad realiza una diversidad de seminarios y congresos de carácter internacional, con el fin de mostrar al mundo el trabajo que desarrollan.

Otra ambiciosa iniciativa de parque tecnológico está en Uruguay. Ahí emerge Zonamérica, centro de una moderna infraestructura -en su mayoría edificios inteligentes con espacios modulares bien equipados- que busca transformarse en el entorno ideal de negocios capaz de centralizar y desarrollar operaciones eficientes y de costos competitivos a escala regional e internacional.

Zonamérica está equipada con conexión de fibra óptica hacia los principales puntos de la Región. Adicionalmente, un telepuerto para comunicaciones satelitales y opciones para hacer enlace vía microondas, entre otras características. Todo ello para generar complejas soluciones demandadas por empresas internacionales vinculadas a la logística, servicios financieros, biotecnología, informática, call center, consultoría y comercio.

También en Uruguay y bajo el amparo de la Universidad de la República se creó el Polo Tecnológico de la ciudad de Pando, que, como gran objetivo, busca facilitar la incorporación del ítem investigación y desarrollo en las empresas.

Este fenómeno de los Parques Tecnológicos a poco también se está viendo en Chile, Paraguay, México, entre otros.

A continuación, en la Ilustración 1 podemos ver dentro de un mapa planisferio los puntos donde se encuentran los principales tecno polos del mundo.

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Ilustración 1 – Mapa de tecno polos en el Mundo.

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II. 1. 2. - INVESTIGACIÓN Y DESARROLLO (I+D)

i) Definición

La Investigación y Desarrollo (I+D) es un término que se aplica a todas a las actividades que realiza una empresa para buscar nuevos conocimientos científicos o tecnológicos (investigación), que luego serán aprovechados de forma ordenada por la empresa (Desarrollo) para la producción de nuevos materiales, productos, la puesta en marcha de nuevos procesos o sistemas, así como la mejora de los que ya existen. Para ello, en las actividades de I+D, será fundamental que pueda apreciarse un importante nivel de creatividad. A su vez, estas actividades tienen un alto componente de novedad para el mercado y la solución de una serie de servicios insatisfechos para el público.

ii) Objetivo

El objetivo que se persigue con la inversión en investigación y desarrollo es conseguir una innovación que logre aumentar tanto las ganancias de la empresa, así como su eficiencia. Esto puede ser por medio de una mejorar de la calidad del producto o servicio, o la reducción de su precio. Es decir, lograr una ventaja competitiva.

iii) Tipos de I+D

Entre los tipos de investigación se encuentran los siguientes:

- Investigación básica o fundamental: Busca adquirir conocimientos nuevos. A través de ella, se pretenden formular hipótesis, leyes y teorías.
- Investigación aplicada: A partir de lo obtenido en la investigación básica, se buscan aplicaciones prácticas. Los conocimientos se utilizan para obtener objetos prácticos. Los resultados de la investigación son susceptibles de ser patentados para ser explotados comercialmente.
- Desarrollo tecnológico: Supone la utilización conocimientos adquiridos en la investigación aplicada. En esta etapa, la empresa ha conseguido los conocimientos «Know How » (saber hacer) y se desarrollan los prototipos.

iv) Ventajas

Entre las ventajas del I+D cabría destacar las siguientes:

- Conocimiento exclusivo de la tecnología generada.
- Independencia tecnológica de la empresa.

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- Posibilidad de explotar comercialmente las innovaciones.
- Se puede acceder a ventajas fiscales por la inversión en I+D.
- Efecto experiencia.

v) Importancia

Las nuevas tecnologías han permitido alcanzar importantes incrementos en la productividad. Por otra parte, las empresas han logrado reducir costes, mejorar la calidad de los productos ofrecidos y ampliar mercados. Es por ello que su supervivencia, y continuidad, se encuentra fuertemente vinculada a la investigación y el desarrollo.

La decisión de qué proyectos se desarrollarán en la empresa depende de los siguientes factores:

- Volumen de recursos financieros disponibles.
- Costes del proyecto.
- Capacidades de la empresa para hacer frente a los proyectos.
- Para comprobar la consecución del proyecto será necesario establecer un sistema de control (GANTT, PERT).

El presupuesto que se destine al departamento de investigación y desarrollo se elaborará de la siguiente forma:

- Aplicación de un coeficiente al presupuesto total.
- Aplicación de un porcentaje sobre el presupuesto total que sea similar al de las empresas competidoras.
- Un porcentaje sobre el volumen de facturación.
- En función de los objetivos establecidos.

Para poder desarrollar I+D en una empresa es necesario desarrollar los siguientes aspectos:

- Es necesario tener en primer lugar objetivos claros, saber qué es lo que se quiere lograr con el I+D. Para ello se debe saber cuáles son las necesidades que se quieren satisfacer de los clientes.
- Investigar el mercado y verificar si las necesidades de los clientes son masivas, es decir si el público en general realmente lo necesita. Asimismo, una investigación de mercado puede dar señales de nuevas oportunidades y productos para una empresa o qué aspectos del producto podrían mejorarse para hacerse masivos.
- Se debe de crear un equipo de I+D en el cual se junten los talentos de profesionales de distintos campos del conocimiento. La idea no es que solo haya ingenieros y científicos. El equipo también debe estar conformado por expertos en finanzas,

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marketing, vendedores que podrían afinar mejor cualquier innovación que se logre en la empresa.

- Desarrollar un plan de I+D el cual incluya los objetivos, los plazos de entrega, las validaciones, pruebas y otras etapas de este proceso.
- Como el costo de este tipo de proyectos de I+D suele ser alto se puede buscar el financiamiento de organizaciones de apoyo a la innovación o alternativamente se puede realizar convenios con universidades para poder contar con laboratorios o con la ayuda de profesionales.

Fuentes: “<http://www.arturocatalan.cl/polos-tecnologicos-en-america-latina/>”,
“<https://polotecnologico.net/>”, “<https://economipedia.com/definiciones/investigacion-desarrollo-id.html>”,
“<https://parques-cientificos-y-tecnologicos--los-nuevos-espacios-productivos-del-futuro-0.pdf>”.

II. 2. - IDEA GENERAL

Los Parques Científicos y Tecnológicos (PCyT) están en constante evolución por todo el mundo. Estos espacios donde se localizan empresas de nuevas tecnologías están sirviendo tanto para rehabilitar y recalificar áreas urbanas como para atraer proyectos de nuevo contenido industrial, como nuevas infraestructuras donde está concentrado el conocimiento y la tecnología, los PCyT serán efectivos tejiendo redes, estableciendo flujos con el tejido industrial, así como creando industrias y no sólo empresas.

A través de este proyecto se busca aprovechar al máximo las posibilidades y recursos que nos ofrece el terreno disponible, según lo permitido por las normativas de edificación, zonificación y forestación vigentes en zona y atendiendo al objetivo de sustentabilidad planteado en el Capítulo IV. -

Además, a través del diseño y la zonificación del predio, se quiere cumplir con las expectativas planteadas por la Universidad para ese terreno.

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II. 3. - EMPLAZAMIENTO Y CARACTERÍSTICAS FÍSICAS DEL TERRENO

II. 3. 1. - UBICACIÓN GEOGRÁFICA

El terreno con en el que cuenta la Universidad y en donde se emplazará el polo Tecnológico está ubicado en la Ciudad de Córdoba, capital de la Provincia de Córdoba. Esta provincia se encuentra en la región central de la República Argentina, limitando con las provincias de Buenos Aires, Santa Fe, Santiago del Estero, Catamarca, San Luis y La Pampa.

La ciudad de Córdoba se ubica a ambas orillas del río Suquía y el Departamento Capital (Córdoba) tiene la forma de un cuadrado de 24 km de lado, totalizando un área de 576 km.

Dentro de la misma, el terreno se emplaza en la región suroeste, sobre la Ruta Nacional N°5, fuera de la Av. De Circunvalación. Más específicamente, se encuentra al sur del campus de la UCC existente, y sus coordenadas son 31°29'25.6"S 64°15'00.7"O.



Ilustración 2 – Ubicación de la Provincia de Córdoba dentro de la República Argentina

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Ilustración 3 – Ubicación del departamento Capital (Ciudad de Córdoba) dentro de la Provincia

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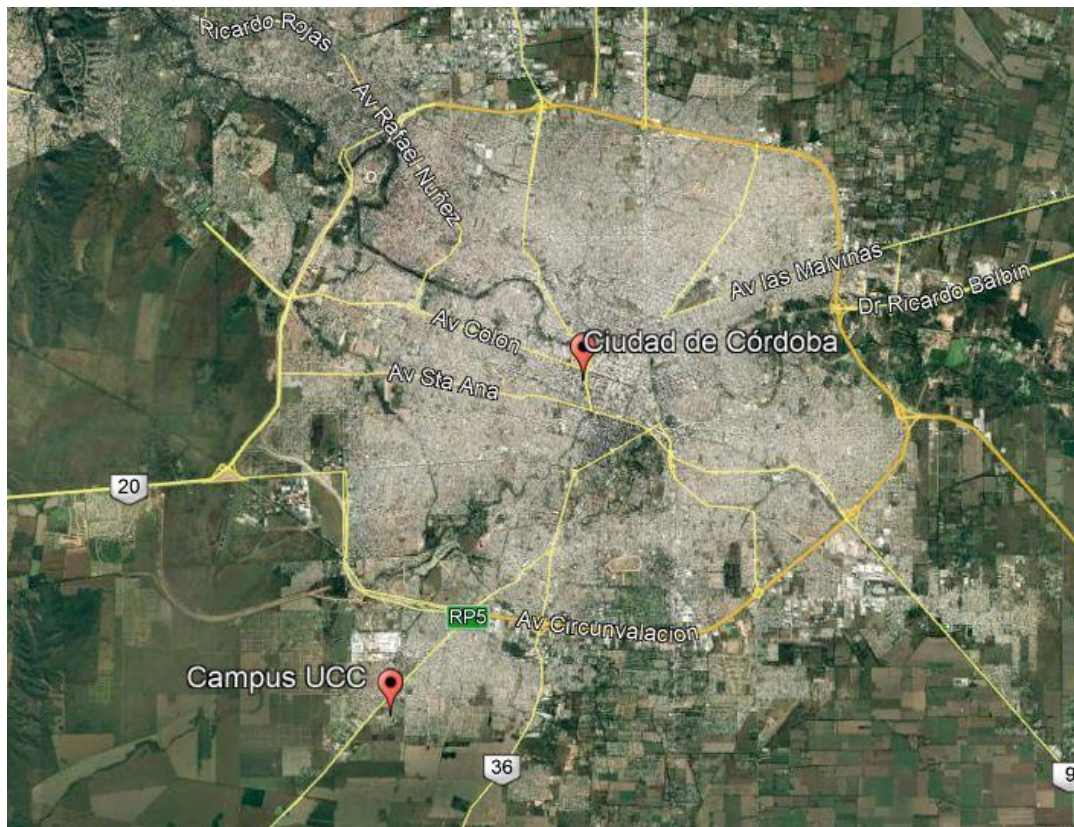


Ilustración 4 – Ubicación del predio respecto de la Ciudad de Córdoba.

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Ilustración 5 – Ubicación del Polo respecto del Campus de la UCC.

i) Accesibilidad

La ruta provincial 5 es una arteria principal e importante vía de acceso a la Ciudad desde la localidad de Alta Gracia. Ésta atraviesa la circunvalación en dirección Noreste y desemboca en la Avenida Armada Argentina, y posteriormente en la Avenida Vélez Sarsfield.

Se destaca la facilidad de acceso desde cualquier punto de la ciudad al terreno en cuestión, ya que éste se encuentra a menos de 4 km de la circunvalación y a 10 km del centro de la ciudad como se puede apreciar en la Ilustración 6- Accesibilidad al Polo desde el Centro de la Ciudad.

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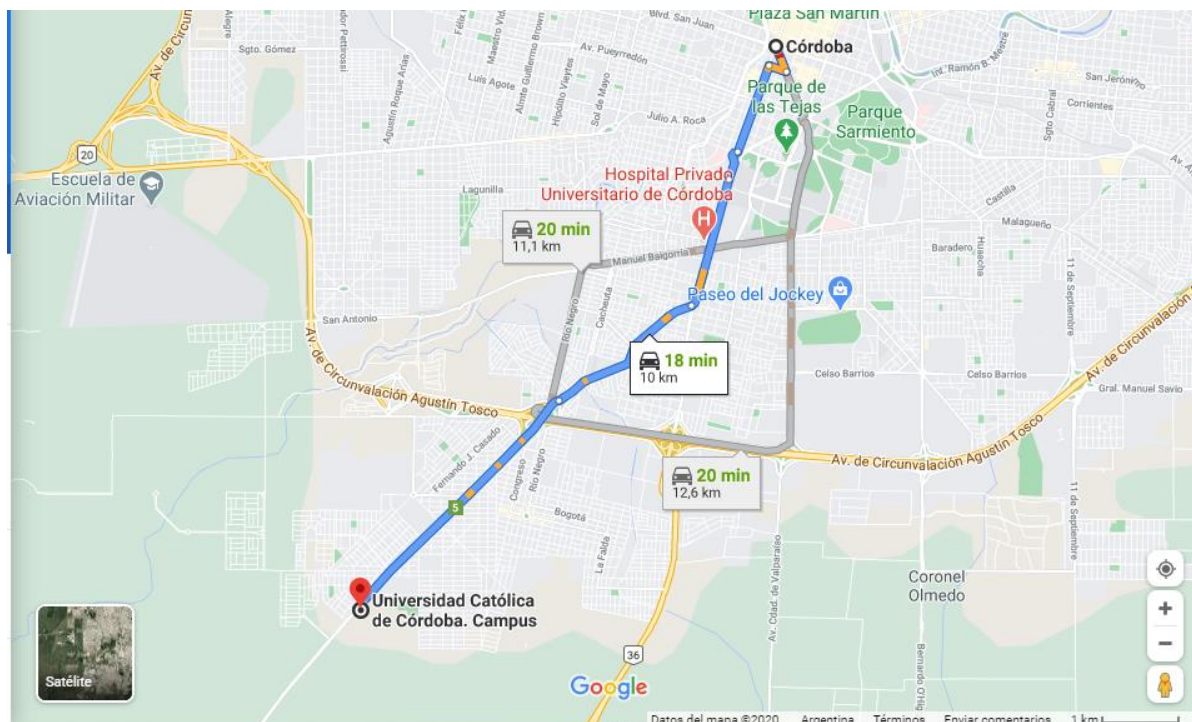


Ilustración 6- Accesibilidad al Polo desde el Centro de la Ciudad

Además, desde que el centro de la ciudad se puede ir en transporte público a través de la línea 34 de la empresa ERSa.

II. 3. 2. - CLIMA

Con respecto al clima de la ciudad de Córdoba, Ciudad "Central" de la Argentina, se trata de un clima templado moderado con las cuatro estaciones bien definidas, como el de la mayor parte de la provincia. En términos generales el clima es pampeano, de inviernos no muy fríos y poco lluviosos. Los veranos son húmedos, con días calurosos y noches frescas. Analizando el viento que presenta Córdoba, se puede decir que los vientos del este y del oeste son raros, de corta duración y poca intensidad. En cambio, en primavera soplan con fuerza creciente principalmente del norte y el noreste. Y en verano nos encontramos que frecuentemente se producen tormentas eléctricas e incluso granizo.

Los Factores para que la temperatura sea en promedio algo más fresca que en otros sitios del planeta a latitudes semejantes son: la altitud y, sobre todo, el ubicarse la provincia en la

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diagonal eólica de los vientos pamperos, vientos fríos que soplan desde el cuadrante sudoeste, originados en la Antártida.

Su temperatura media anual ponderada en todo el siglo XX fue de 18 °C. En enero, mes más cálido del verano austral, la máxima media es de 31,1 °C y la mínima media de 18,1 °C. En julio, mes más frío, las temperaturas medias son 18,6 °C de máxima y 5,5 °C de mínima. Aún en invierno pueden ser frecuentes días algo cálidos, debido a la influencia del viento Zonda. Con respecto a las nevadas de la ciudad, estas son poco frecuentes, las últimas se registraron en 1984, 2007 y 2009.

La Tabla 1 – Records Climáticos de la Ciudad de Córdoba detalla los récords históricos registrados:

Tabla 1 – Records Climáticos de la Ciudad de Córdoba

Temperatura más elevada	42.4 °C	22 de diciembre de 2011
Temperatura más baja	-12 °C	6 de julio de 1944
Año más lluvioso	1422,69 mm	1997
Año con más tormentas	82 tormentas	1975
Años con más nevadas	Siete precipitaciones	1973 y 1974 2007

Dada la extensión del conurbano, existe una diferencia considerable entre el área céntrica y la periferia. Si bien el barrio a analizar se encuentra fuera de la zona central, es importante resaltar, que, en el área céntrica, densamente edificada y ubicada en una depresión, es el núcleo de una importante isla de calor. Además, presenta fenómenos de smog (es una forma de contaminación originada a partir de la combinación del aire con contaminantes durante un largo período de altas presiones (anticiclón), que provoca el estancamiento del aire y, por lo tanto, la permanencia de ellos en la troposfera y a veces, en la estratosfera, debido a su mayor densidad), sin consecuencias para la salud.

A continuación, se anexan dos imágenes en las que se muestra a partir de un gráfico y una tabla las temperaturas medias, máximas, mínimas y lluvias promedios en los diferentes meses.

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Gráfico 1 – Variación anual de temperaturas y precipitaciones.

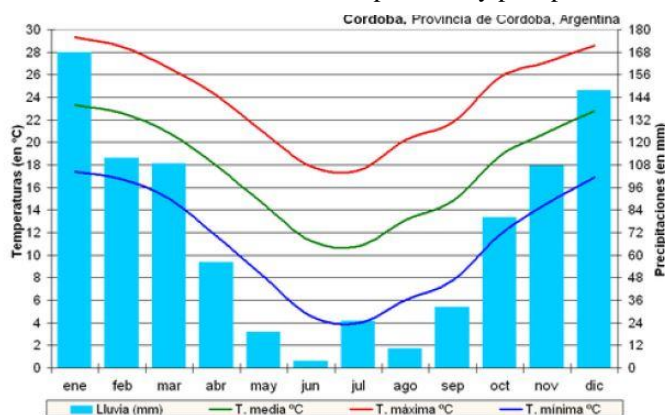


Tabla 2 – Variación anual de temperaturas y precipitaciones.

Estación Meteorológica Córdoba.												
Mes	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic
Temperatura diaria máxima (°C)	31.1	30.1	27.6	24.9	22.0	18.5	18.6	21.0	23.3	26.1	28.4	30.3
Temperatura diaria mínima (°C)	18.1	17.4	15.6	12.3	9.3	5.7	5.5	6.7	9.1	12.6	15.2	17.3
Precipitación total (mm)	121.7	99.8	110.3	52.2	18.9	11.4	12.8	9.7	33.8	66.4	96.6	136.9
Fuente: «Freemeteo – Promedios 1961-1990, Tablas 1 y 2». 4 de diciembre de 2009												

II. 3. 3. - FLORA Y FAUNA

Otro aspecto importante a desarrollar es la conformación del medio en el cual se encuentra el polo. Si bien las especies autóctonas del territorio actualmente está sufriendo cambios importantes debido a la urbanización en las diferentes zonas, en los siguientes párrafos se detallan algunas de las principales especies.

Respecto a la fauna, se puede encontrar, aves (benteveo, lechucita vizcachera, carancho, paloma, hornero, gorrión, etc.), mamíferos (gatos, perros, zorros y roedores) y artrópodos (arañas, escorpiones, hormigas, entre otros).

En la flora, por otro lado, se puede encontrar: algarrobo, quebracho, aromito, espinillos, mistol. Estas especies se encuentran dentro de los bosques nativos que se hayan en el terreno del emplazamiento.

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II. 3. 4. - CONFORMACIÓN GEOMORFOLÓGICA

Los principales suelos finos que más abundan en la ciudad de Córdoba son limo y loess. Las mayores diferencias radican, en general, en su origen geológico más que en su distribución granulométrica. Así, el limo corresponde a un sedimento re-depositado luego de una ocurrencia fluvial mientras que el loess es netamente eólico.

Los suelos encontrados a orillas del río Suquía y del arroyo La Cañada (o de los paleo-cauces que llegan a ellos) corresponden, principalmente, a depósitos fluviales modernos mientras que, hacia afuera de estos cauces, se asientan las formaciones eólicas.

A un suelo loésico, dentro de la mecánica de suelos clásica, se lo puede clasificar según el SUCS dentro de alguno de los siguientes grupos: ML, CL ó CL-ML.

El tipo de suelo que presenta la ciudad de Córdoba se caracteriza por ser un suelo fino colapsable. Esto significa que cuando el mismo absorbe agua, su volumen disminuye bruscamente. Por lo cual, la superposición de inundaciones y esta característica particular del suelo trae aparejados problemas serios de estabilidad en la mayoría de las estructuras que Córdoba posee.

Casagrande clasifica los suelos en función del Índice de Plasticidad (IP) y del límite líquido (WL ó LL). Según esta clasificación, se puede observar la zona en la que se encuentra el suelo cordobés.

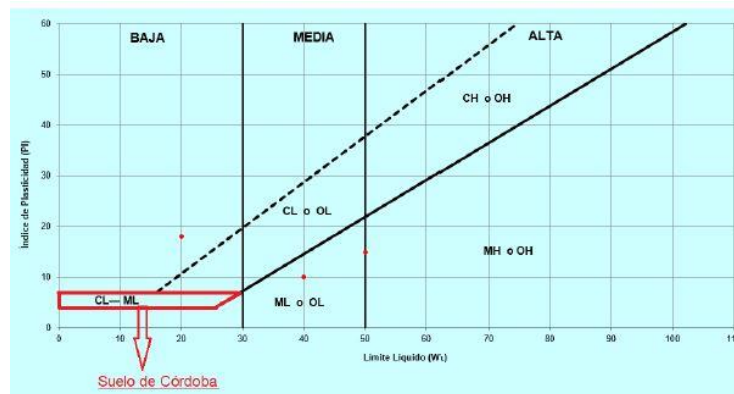


Gráfico 2 – Abaco de Casagrande.

La Universidad Nacional de Córdoba realizó un estudio y análisis sobre la variabilidad de las propiedades geotécnicas de los limos y loess de la ciudad, diferenciando 6 zonas que se muestran en la siguiente imagen. Según este estudio, el terreno donde se ubica el polo proyectado se encuentra dentro de la zona número IV, por lo que el suelo se compone de planicies loésicas de poca pendiente. Dada la baja resistencia de este tipo de suelo cuando se pone en contacto con el agua, el tipo de fundación de las construcciones de la zona suelen ser profundas para evitar futuras complicaciones en las mismas.

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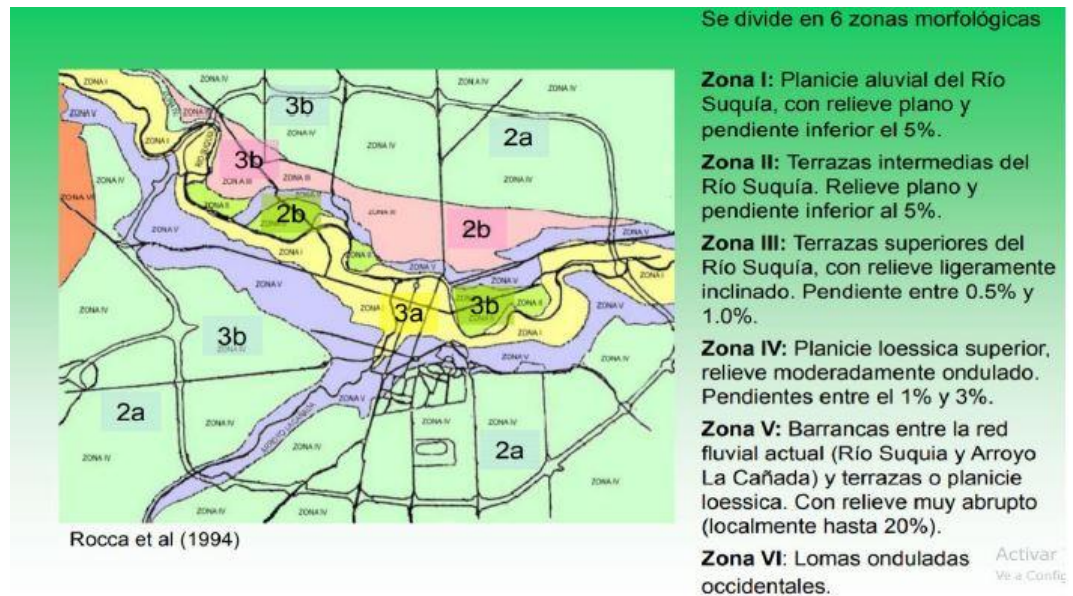


Ilustración 7 – Formación geomorfológica de la Ciudad de Córdoba.

II. 3. 5. - RELIEVE

La Ciudad tiene una gran variedad de características en cuanto al relieve, pero en el caso de la zona Sur de la misma (lugar en donde se encuentra emplazado el proyecto) predomina la llanura.

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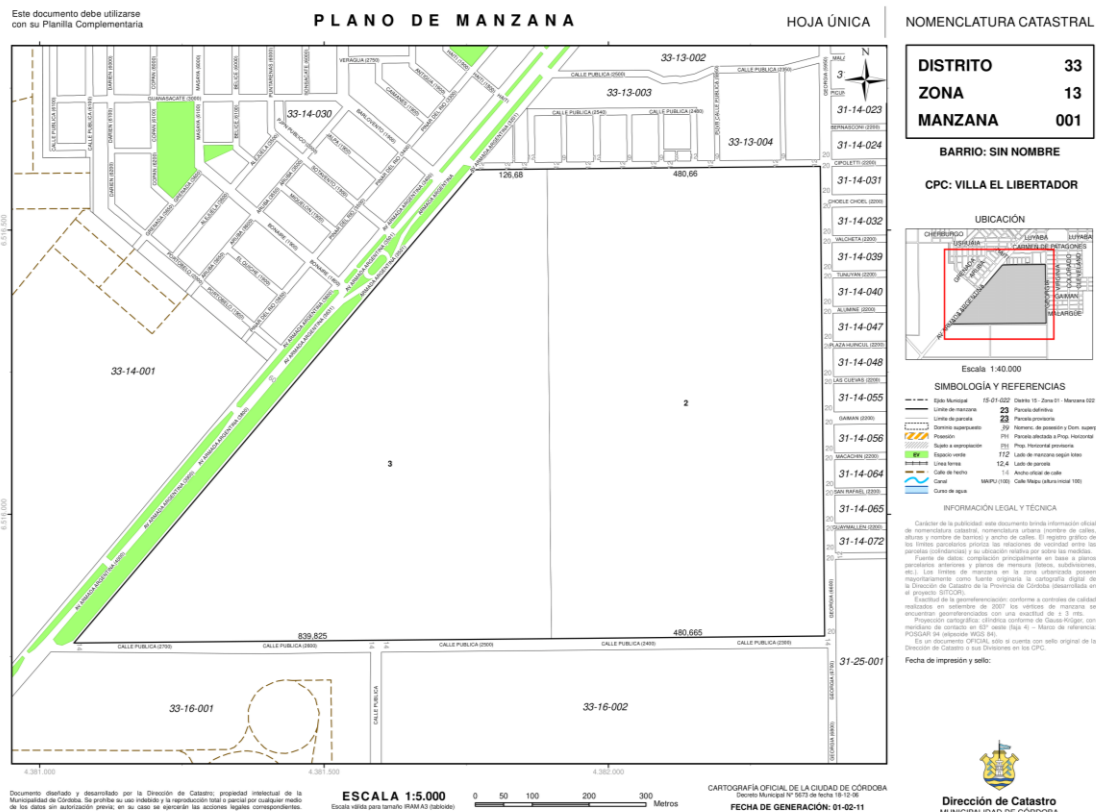


Ilustración 8 – Plano de Catastro del terreno.

Sin embargo, existe un mínimo relieve como se muestra a continuación en los distintos perfiles topográficos extraídos de la herramienta Google Earth.

En el sentido Norte-Sur la mayor diferencia de niveles ronda apenas los 3m, mientras que en el sentido Este- Oeste existe mayor diferencia, siendo 10m entre el punto más alto (Oeste) y el más bajo (Este).

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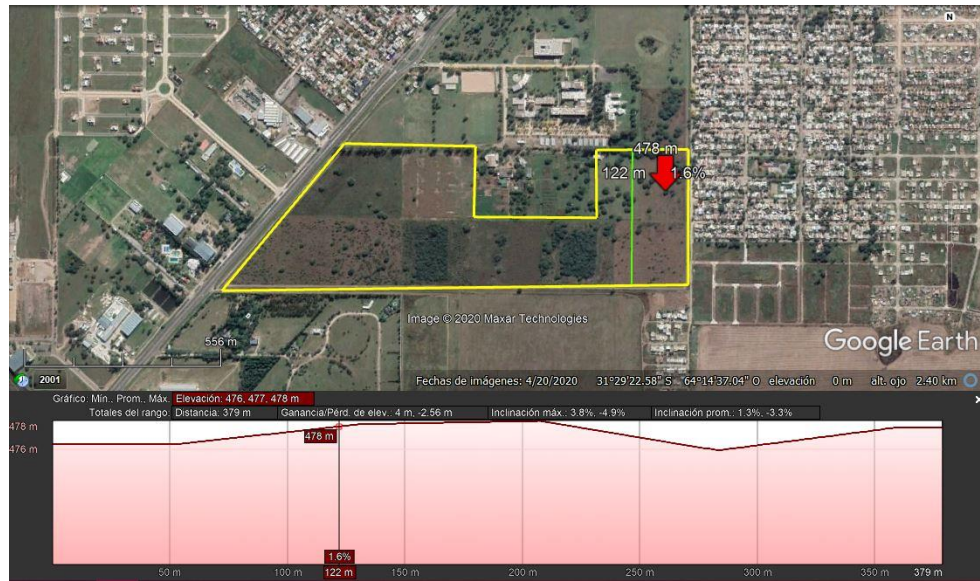


Ilustración 9 – Perfil topográfico Norte-Sur.

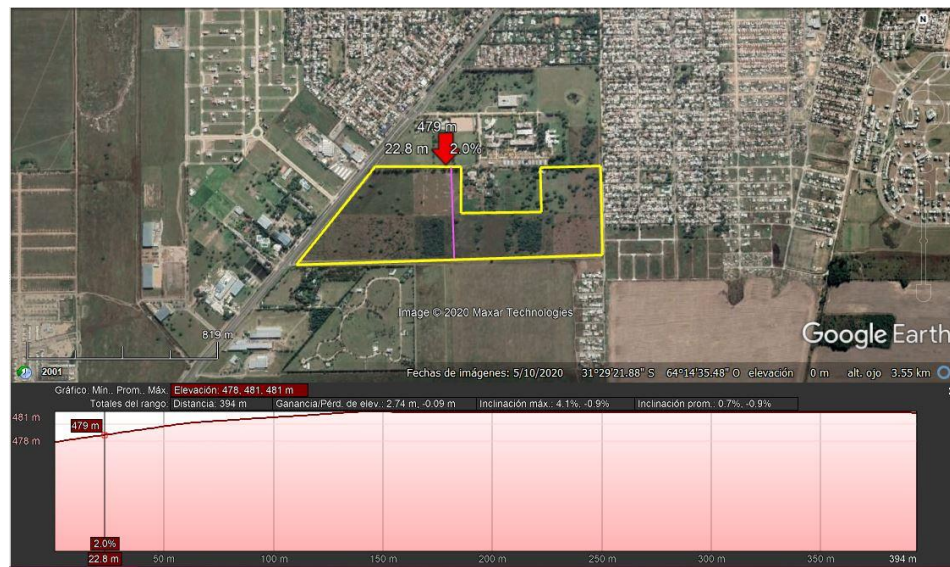


Ilustración 10 – Perfil topográfico Norte-Sur.

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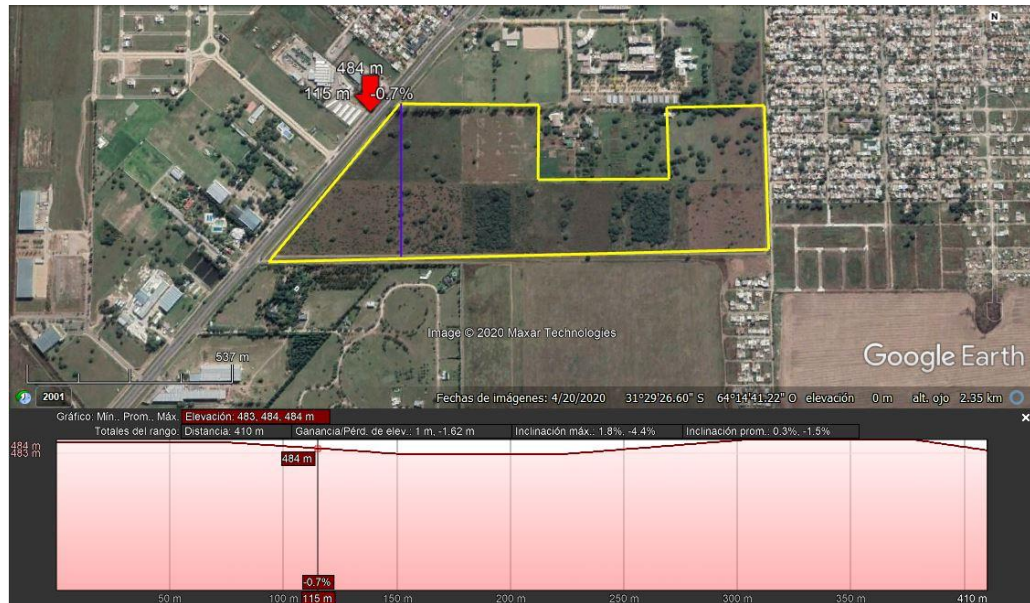


Ilustración 11 – Perfil topográfico Norte-Sur.

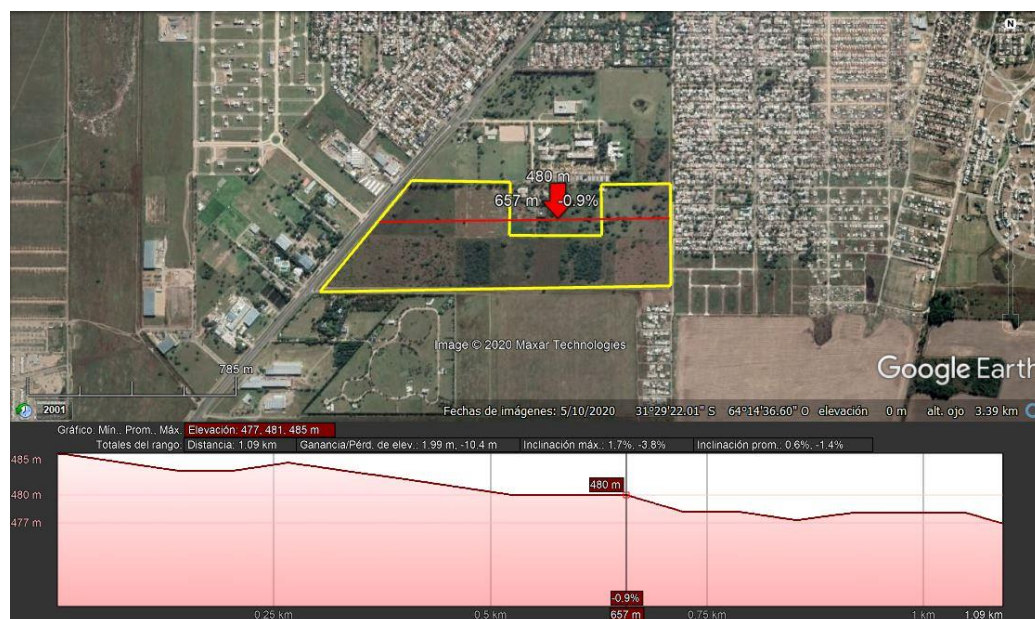


Ilustración 12 – Perfil topográfico Este- Oeste.

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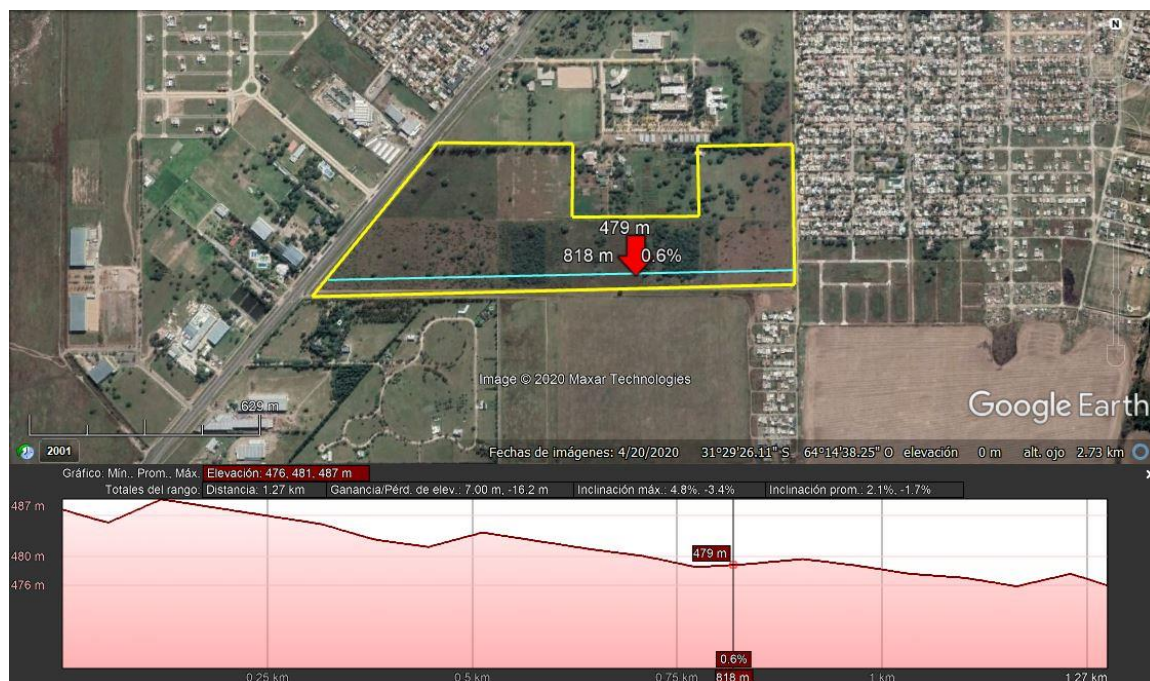


Ilustración 13 – Perfil topográfico Este- Oeste.

Fuentes: <https://gobiernoabierto.cordoba.gob.ar/mapas/parcelarios/>,
<https://eco.mdp.edu.ar/cendocu/repositorio/01008.pdf>,
<https://www.turismocordoba.com.ar/provincia/aspectofisico.php>,
<https://viajarg.com/provincias/cordoba/relieve-e-hidrografia/>.

II. 4. - ZONIFICACIÓN

Al momento de pensar en la distribución de las zonas del predio, el enfoque se centró en tres aspectos: ambiental, funcional y técnico.

En primer lugar, la sustentabilidad es una línea que debe atravesar todo el proyecto como premisa esencial, por lo cual se tomarán distintas medidas detalladas más adelante. Además, se hará foco en la funcionalidad para que sea compatible con las necesidades del usuario. Y, por último, todo proyecto debe ser viable técnicamente, factor limitante para el diseño de un proyecto que se pueda llevar a cabo.

Para ello, se dividirán los distintos espacios en las siguientes zonas:

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- A. **Zona de laboratorios:** edificios destinados a industrias más “pesadas” que necesiten infraestructura para llevar a cabo prácticas, experimentos, desarrollo de productos a pequeña escala, etc.
- B. **Zona de oficinas:** edificios dedicados a TIC’s y afines, en los cuales la comodidad del usuario en su espacio de trabajo ocupa una prioridad, para asegurar que el rendimiento sea el máximo. Se modularon los distintos edificios dentro de complejos de igual tamaño, Ver plano A002 del Anexo.
- C. **Centro de convenciones:** Se destinará un área de 7200 m² para la construcción de un edificio especial para eventos o reuniones de gran tamaño. Además, en el mismo predio se ubicará un módulo de mantenimiento y un lugar específico para centralizar la red contra incendios, espacio técnico para las bombas y el manejo del sistema. Ver plano A003 del Anexo.
- D. **Espacios comunes y de recreación:** Éstos se refieren a espacios gastronómicos y parques. Por las leyes de bosques mencionadas en el inciso IV. 2. -, se tiene que respetar la flora autóctona, y mediante este proyecto se aprovecharán como pulmones verdes manteniendo de esta manera, una idea que se asemeje a la del Campus de la Universidad.
- E. **Laguna de retención:** con el objetivo de generar el mínimo impacto hidrológico por la impermeabilización del suelo como consecuencia de la construcción de edificios y calles, se destinarán 6500m² para la ejecución de una laguna de retención.
- Las lagunas de retardo son lagunas artificialmente generadas que aseguran la contención y almacenamiento de aguas de lluvia. Éstas no solo previenen inundaciones en épocas de lluvia, sino que también suponen un espacio de recreación en las épocas de sequías. Al ubicarse próximo a una zona con gran arboleda y dentro de una mega rotonda, supone un espacio ideal para la utilización como plaza. Ver plano A003 del Anexo.
- La ubicación de la laguna se definió con los perfiles de altimetría extraídos de la herramienta Google Earth, buscando que la cota se la más baja del terreno, en este caso es el sector Sureste del predio.
- F. **Estacionamientos:** cada grupo de dos edificios tendrá su propio estacionamiento. Para dimensionar las plazas necesarias se utilizó la siguiente ecuación:

$$N^{\circ} \text{ plazas. Necesarios} = N^{\circ} \text{ personas} \times F_{\text{ocupac}} \times F_{\text{TP}} \times F_{\text{pas}}$$

Se definió tres factores de reducción:

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- Focupac: Factor de ocupación de los puestos de trabajo para tener en cuenta las situaciones en las que las personas no asisten ya sea por razones personales, por la adopción del teletrabajo cada vez más común.
- FTP: Factor por la utilización de Transporte Público u otros medios, ya sea bicicleta, a pie, taxi.
- Fpas: Factor por ocupación de cada automóvil, para tener en cuenta si por automóvil se traslada más de una sola persona.

Se presenta a continuación la planilla de cálculo utilizada la cual incluye los criterios de adopción de los distintos valores para cada factor de reducción.

Tabla 3 – Cálculo de plazas de estacionamiento

CALCULO ESTACIONAMIENTO				
	VARIABLE	UN	VALOR	OBSERVACIONES / CRITERIOS
N°/p	Personas por piso		125	
N°/e	Personas por edificio		500	
F. oc	Factor de ocupación de los puestos de trabajo	-	0,8	Por modalidades home office
F.TP	Factor por Transporte Publico u otros medios	-	0,5	si 50% utiliza otros medios alternativos al automovil.
Fpas	Factor por ocupación de cada automovil	pers/auto	0,67	Si en cada automovil viajan 1,5 personas promedio
N° estac. Necesarios= N°pers/e x F.Oc x F.TP x F.pas		plazas	133	

Para concluir, son necesarias 133 plazas por edificio, es decir, 266 por complejo.

II. 4. 1. - PREDIMENSIONADO DE CALLES Y MANZANAS

i) Disposición de Calles y Edificios

En el Master Plan se tomó como vértebra principal una calle que corre de Este a Oeste, y calles secundarias que corren de Norte a Sur alimentando los diferentes módulos de 4 edificios cada uno. Los módulos son en total 5, obteniendo así un total de 20 edificios con similar tipología. La excepción son los dos módulos al Este, en donde se unieron las calles secundarias para formar un espacio recreativo y un centro de convenciones. Ver plano A001 del Anexo, en donde se representa la totalidad del Master Plan.

ii) Manzanas

En este proyecto no hay manzanas tradicionales sino distintos módulos prácticamente independientes entre sí con su propio estacionamiento, ingreso y mega rotonda.

iii) La importancia de las mega rotondas

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Las mega rotondas influyen tanto para la parquización y estética del proyecto como para la ecología, ya que se trata de 2700 m² de pulmón verde para cada módulo.

iv) Predimensionado de calles

“Todas las calzadas de calles a abrir deberán ser tratadas con pavimento rígido o flexible y cordón cuneta según las características del suelo y jerarquías viales en un todo de acuerdo a las normas de pliegos, especificaciones y condiciones que para cada caso exija la Dirección de Obras Viales, -Subdirección de Desagües- de la Municipalidad. En estas obras deberá preverse una evacuación normal de las aguas pluviales y efectuarse todas las construcciones y/o instalaciones necesarias para evitar erosiones o cualquier otro perjuicio que pudiere ocasionar en las zonas colindantes según lo previsto por la Dirección de Obras Viales, Subdirección de Desagües.” – Art. 94 - Ordenanza N° 8060.

Para este proyecto en particular se tienen calles principales (12 m transversal y doble sentido), y calles secundarias (8,5 m transversal y un solo sentido). Ambas son definidas según la ordenanza 8060, Sección V: Del tratamiento de calzada como sigue;

“Calles locales: son aquellas vías de acceso vehicular a los lotes y a su equipamiento inmediato. Son de baja velocidad y poco volumen vehicular, no cuenta con control de accesos ni separador central, siendo sus cruces a nivel.”

II. 4. 2. - REPRESENTACIÓN GRÁFICA

La herramienta de AutoCAD de AutoDesk permite diseñar en dos dimensiones con mayor precisión los espacios, en este caso aplicado a la planificación urbana. Estas piezas gráficas pueden ser visualizadas en los planos A001, A002 y A003 del Anexo.

Por otro lado, para una representación más estética se optó por la utilización de Sketchup, un software de modelado en tres dimensiones desarrollado por Trimble, el cual permite una visión de volumetría y espacios más clara. Con la ayuda de esta herramienta se renderizó el modelado en 3D para una mejor interpretación de los ambientes, buscando además transmitir de la manera más real posible lo que significaría el proyecto de este Master Plan.

II. 5. - SERVICIOS DE INFRAESTRUCTURA

Según la normativa municipal se determina que:

“En toda urbanización será obligatoria la realización de obras de Provisión de Agua Corriente Potable asegurada por organismos oficiales. Energía Eléctrica Domiciliaria, Alumbrado Público, Arbolado de Calles y Parquización de Espacios Verdes, Pavimento

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Rígido y/o Pavimento flexible con cordón cuneta y en casos de que la Dirección de Planeamiento Urbano así lo determine o considere conveniente compactado con enarenado y cordón cuneta como mínimo. Concepto que deberá ser extensivo a todas las bocacalles de la urbanización. Evacuación de Aguas Pluviales, Red de Desagües Pluviales, entubados, Red de Gas natural, Red Colectora de Cloacas e Instalación de un Teléfono Público cada 8 (ocho) manzanas.” - Art. 74 - Ordenanza N° 8060.

Todas las obras de infraestructura establecidas se deben proyectar, realizar y conservar por loteador, de conformidad a lo establecido por las disposiciones de los organismos correspondientes. En este caso, todas las redes serán independientes del Campus actual de la UCC, por la dimensión del proyecto.

En caso de no ser posible la provisión de alguno de los siguientes servicios: Gas Natural, Red de Desagües Pluviales entubados, Red colectora de cloacas, o instalación de un Teléfono Público cada 8 (ocho) manzanas, la imposibilidad debe ser acreditada con certificado expedido por los organismos técnicos correspondientes.

En toda nueva urbanización el trazado y ejecución de las redes de infraestructura aérea o subterránea debe ser canalizada bajo la faja de estacionamiento fuera de calzada, o en las fajas que a criterio de la Dirección de Planeamiento Urbano se ejecuten.

Los organismos intervinientes deberán controlar la marcha de los trabajos en forma periódica, verificando el cumplimiento de los proyectos aprobados. Los Organismos Técnicos intervinientes deben fijar por Vía Reglamentaria las condiciones particulares para la ejecución de las diferentes obras, estableciendo plazos para la puesta en vigencia, caducidad de especificaciones, condiciones y reglamentaciones vigentes con anterioridad a la promulgación del presente Reglamento, así como plazos de validez de visaciones y aprobaciones todo concordante con los plazos para la ejecución de las obras otorgadas para cada urbanización.

II. 5. 1. - RED CLOACAL

Como se mencionó anteriormente, se debe dejar prevista la infraestructura para la futura conexión a las cloacas.

Se proveerá una red colectora de cañerías y el tendido de la red cloacal se realizará con caños de PVC (Policloruro de Vinilo) para que el proyecto sea compatible con el proyecto desarrollado en el año 2012 por los alumnos de la carrera de Ingeniería Civil de la Facultad de Ingeniería de la UCC. Los caños deben tener un diámetro que permita evacuar el 80% de la dotación de agua potable y deben trabajar a presión atmosférica. Además, la red debe ubicarse en el centro de la calzada, con una tapada mínima de 1,20 m y una pendiente mínima del 0.3 % para evitar que los sólidos sedimenten en las tuberías. Todos los conductos deben redireccionar los efluentes cloacales hacia el punto donde se conectará con la red, el cuál debe estar ubicada en la cota más baja del terreno.

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II. 5. 2. - RED DE AGUA POTABLE

La empresa Aguas Cordobesas suministra el servicio para la zona, por lo tanto, es factible la conexión al mismo.

Toda urbanización que se realizare en Áreas Urbanizables o en áreas de Urbanización Condicionada, conforme a lo establecido en Plano de Zonificación y por el Reglamento de Tipo del Suelo, deberán ser provistas de agua corriente potable para el total de parcelas espacios verdes, plazas y espacios de uso público en general.

La provisión de agua antiguamente era realizada por la Dirección Provincial de Obras Sanitarias, en la actualidad es realizada por Aguas Cordobesas. El peticionante debe documentar la factibilidad de extensión de la infraestructura y de provisión de agua mediante certificado del mencionado ente y ante la Municipalidad para obtener la aprobación del anteproyecto.

II. 5. 3. - ENERGÍA ELÉCTRICA Y ALUMBRADO PÚBLICO

La energía eléctrica será provista por la Empresa Provincial de Energía Eléctrica (EPEC). Según la ordenanza 8060, Art. 84°, toda urbanización debe ser provista de energía eléctrica por la Empresa Provincial de Energía de Córdoba. (E.P.E.C.). Las instalaciones de la red de distribución deberán prever el servicio domiciliario, cuya instalación es obligatoria. La instalación debe ser proyectada y realizada por el loteador de acuerdo a lo establecido las especificaciones técnicas y pliegos de condiciones que fije E.P.E.C. y la Dirección de Alumbrado Público.

Las redes de distribución de energía eléctrica, tanto para alumbrado público como para el servicio domiciliario, deberán hacerse con instalaciones subterráneas, exceptuando los casos en que la Dirección de Alumbrado Público considere factible la excepción.

La potencia estimada necesaria para el loteo cuestión es de no menos de 6000kW siendo un número muy aproximado. Teniendo en cuenta que una casa mediana necesita una potencia de 5,8 kW, y un local promedio una potencia de 10,5kW, para todo el loteo el cálculo es como sigue:

Las instalaciones de la red de alumbrado se deben proyectarán y ejecutarán conforme a las especificaciones técnicas y pliego de condiciones que define la Dirección de Alumbrado Público, quien controlará las obras, reglamentando el trámite de coordinación con E.P.E.C

Las instalaciones de la red de alumbrado público son transferidas sin cargo por los Urbanizadores a la Municipalidad de Córdoba. En este caso, constará de la instalación de cables de PVC colocándose postes de 9m de alto dotados de artefactos LED, separados entre sí 24 m.

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II. 5. 4. - DESAGÜES PLUVIALES

La norma vigente dispone que:

- La instalación de los desagües pluviales queda a cargo de cada propietario.
- La misma debe desembocar sobre el cordón cuneta de las calles.
- Los desagües pluviales se deben realizar por escurrimiento superficial de las calles siguiendo la pendiente de las mismas, para ser depositados finalmente en una laguna de retención.

II. 5. 5. - RED DE GAS NATURAL

El loteo se encuentra dentro de la zona de influencia de la empresa Ecogas.

Se propone una red de tuberías de hierro negro y acero de alta resistencia, dispuestas a una distancia de 1,5 m de la línea municipal.

La tapada mínima debe ser de 1,3 m y la instalación debe ser realizada por un gasista matriculado.

II. 6. - NORMATIVA DEL PREDIO

Respecto a la ocupación y uso del suelo, la Ciudad de Córdoba se rige por la Ordenanza N°8256: "Ocupación del suelo dentro del ejido municipal". Dicha ordenanza divide al territorio de la ciudad en distintas Zonas según uso del uso y allí encontramos las pautas necesarias para poder edificar dentro de los parámetros especificados según cada una.

El predio donde se va a emplazar el parque tecnológico se encuentra en la Zona "IS" según los planos de Catastro Municipal pero dicha clasificación no se encuentra explicitada en la ordenanza mencionada anteriormente.

Por ello es que luego de realizar las averiguaciones pertinentes a los entes e instituciones correspondientes, se debió modificar la ordenanza, añadiendo los artículos que se consideraban necesarios para que el terreno corresponda a una Zona descrita en la Ordenanza Municipal.

A continuación, se citarán los artículos elaborados:

"En el caso de la Zona IS estructurada sobre la Avenida Armada Argentina (RN5), la delimitación abarca un espacio comprendido en una distancia de 1.122,00 (mil cientos veintidós) metros hacia el Sur a partir de la Línea Municipal Norte de la Calle Cipoletti. En dicha Área y cuando las parcelas con frente a las vías mencionadas tuviesen parte en el espacio resultante de la delimitación anterior y parte fuera del mismo, se podrá considerar incluida en el mismo la totalidad de la parcela, siempre que el remanente que quedase afuera no supere el 20 % (veinte por ciento) de la superficie total de la parcela. En esta zona se podrán emplazar

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tanto estructuras de equipamiento (educativos, sanitarios, etc.) como del tipo industrial asimilable”. – **Art. 46°, CAPITULO IV – TÍTULO II.**

“La presente Zona se regirá por las siguientes disposiciones:

Carácter Urbanístico:

Zona de ubicación periférica, destinada a extender la urbanización con un uso residencial de media densidad, con vivienda colectiva, donde se alienta la ocupación con planeas que provean equipamiento a nivel de sector urbano, con intensidades de edificación diferenciadas, mayor número de unidades de vivienda y formas variadas de ocupación. Restricción máxima al asentamiento de actividades industriales o asimilables, salvo en zonas exceptuadas como en el caso de las IS.

Delimitación:

Según plano de Zonificación y Artículos 43°, 44°, 45° y 46°.

Ocupación y Edificación:

a) Factor de Ocupación del Suelo (F.O.S.) máximo: 70 % (setenta por ciento).

b) Factor de Ocupación Total (F.O.T.) Máximo: 2 (dos).

c) Altura máxima de edificación: 12,00 (doce) metros.

d) Retiros de Línea de Edificación de frente: según Artículo 9°.

Número Máximo de Unidades de viviendas por parcela:

Según Tabla N° 2 (Art. 42°) y lo especificado en 5.b. del presente Artículo.

Disposiciones relativas a planes de viviendas:

Los planes de vivienda a materializarse en la presente Zona deberán respetar las disposiciones de los puntos 1 a 4, sin perjuicio de la observancia de las siguientes disposiciones específicas.

a) Planes de hasta 200 viviendas:

Podrán materializarse total o parcialmente con cualquiera de los tipos de vivienda regulados en la presente. Para el caso de vivienda colectiva se admitirá una relación mínima de una unidad cada 100,00 m² (cien metros cuadrados), de suelo.

b) Planes de más de 200 viviendas:

En caso de planes de vivienda que dotasen de espacio para equipamientos comunitarios superiores a las exigidas por normas en vigencia, como asimismo edificaciones especiales para aquellos destinos, definidos por los organismos técnicos competentes, se admitirá una relación mínima de una unidad de vivienda cada 80,00 m² (ochenta metros cuadrados). Esta posibilidad solo será permitida cuando a juicio de los organismos de aplicación se justificare la existencia en el sector de un déficit de equipamiento a cubrir por la dotación del plan de que se trate.

c) En cualquiera de los casos en que se materializare con vivienda individual agrupada, será de aplicación para el cálculo del número máximo de unidades de vivienda por parcela, frente y tamaño mínimo de superficie propia de uso exclusivo, lo dispuesto al respecto para Zona K.

d) Normas de ocupación y edificación para viviendas colectivas:

Para el caso 5.a):

-Factor de Ocupación del Suelo (F.O.S.) máximo: 40 % (cuarenta por ciento).

-Factor de Ocupación Total (F.O.T.) máximo: 2 (dos).

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-Altura máxima de edificación: 26,00 (veintiséis) metros.

Para el caso 5. b):

-Factor de Ocupación del Suelo (F.O.S.) máximo: 30 % (treinta por ciento).

-Factor de Ocupación Total (F.O.T.) máximo: 2,50 (dos con cincuenta).

-Altura máxima de edificación: 36,00 (treinta y seis) metros.

-Retiros de edificación de todos los linderos:

Cuando la edificación supere los 12,00 (doce) metros de altura se deberá respetar un retiro igual o mayor a $1/3$ (un tercio) de la altura, y nunca inferior a 6,00 (seis) metros. En el caso de retiros de linderos, cuando tuvieren uno de sus lados abierto totalmente al espacio de vía pública, será de aplicación la reducción prevista en el Artículo 13° inciso a).

Cuando la modificación no supere los 12,00 (doce) metros de altura no será exigible el retiro de linderos.

e) Normas de ocupación y edificación para estructuras de equipamiento:

- Factor de Ocupación del Suelo (F.O.S.) máximo: 50 % (cincuenta por ciento).

-Factor de Ocupación Total (F.O.T.) máximo: 1,5 (uno punto cinco).

-Altura máxima de edificación: 20,00 (veinte) metros.

-Retiros de edificación de todos los linderos:

Cuando la edificación supere los 12,00 (doce) metros de altura se deberá respetar un retiro igual o mayor a $1/3$ (un tercio) de la altura, y nunca inferior a 6,00 (seis) metros. En el caso de retiros de linderos, cuando tuvieren uno de sus lados abierto totalmente al espacio de vía pública, será de aplicación la reducción prevista en el Artículo 13° inciso a).

Cuando la modificación no supere los 12,00 (doce) metros de altura no será exigible el retiro de linderos.

f) Disposiciones relativas:

Deberá respetarse en todos los casos la calle perimetral y faja de resguardo establecidas por Ordenanza. N° 8060 en relación a colindancia con urbanización o asentamiento industrial existente o con área no urbanizada. Dicha calle y faja de resguardo se trazarán de acuerdo a lo especificado en Gráfico N° 19, admitiendo variantes que surjan de trazados urbanísticos a mantener (como por ejemplo continuidad de calles) los que se fijarán previo estudio particularizado de Dirección de Planeamiento Urbano.

En caso de colindancia con asentamiento industrial existente localizado con anterioridad a las normas que fijan la obligatoriedad de retiros correspondientes, el ancho de faja de resguardo deberá fijarse en cada caso, incrementando el mínimo de 12,50 (doce con cincuenta) metros hasta un máximo de 25,00 (veinticinco) metros que, previo estudio, fijará el Organismo de Aplicación". –**Art. 61°, CAPÍTULO I – TÍTULO III.**

A partir de estas modificaciones podemos extraer los parámetros a utilizar a la hora de edificar:

- Factor de Ocupación del Suelo (F.O.S.) máximo: 50 % (cincuenta por ciento).
- Factor de Ocupación Total (F.O.T.) máximo: 1,5 (uno punto cinco).

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- Altura máxima de edificación: 20,00 (veinte) metros.
- Retiros de edificación de todos los linderos:
 - ✓ Cuando la edificación supere los 12,00 (doce) metros de altura se deberá respetar un retiro igual o mayor a $1/3$ (un tercio) de la altura, y nunca inferior a 6,00 (seis) metros. En el caso de retiros de linderos, cuando tuvieren uno de sus lados abierto totalmente al espacio de vía pública, será de aplicación la reducción prevista en el Artículo 13° inciso a).
 - ✓ Cuando la modificación no supere los 12,00 (doce) metros de altura no será exigible el retiro de linderos.

III. - EDIFICIO

III. 1. - INTRODUCCIÓN

El tipo de edificio que se decidió diseñar corresponde al tipo de empresas de desarrollo de tecnologías o TIC's. Si bien este proyecto se desarrolla de manera tal que la planta sea adaptable a cualquier cliente que lo ocupe (gracias a la versatilidad que aporta la planta libre), se propone un diseño modular, con divisiones de construcción en seco para su modificación de ser deseado.

Cuando se tuvo que decidir por la tipología a optar para diseñar, se consideró que hoy en día, gracias a fenómenos mundiales como la globalización, las tecnologías y las corporaciones dedicadas al desarrollo de las mismas están ocupando un importante lugar en la sociedad, ya que los sistemas tecnológicos o softwares están en prácticamente todo. Este fenómeno se ve sobre todo en la Ciudad de Córdoba, que después de la Ciudad Capital del país, es donde se concentran la mayor cantidad de empresas y start-ups de este tipo y donde se concentra un extenso volumen de estudiantes universitarios de estas áreas que se encuentran en auge como Ingenierías de Sistemas, Software, Programación, Computación, etc.

III. 2. - ANTECEDENTES

Como antecedente al proyecto de edificio de TIC's, se tuvo la oportunidad de visitar y analizar las instalaciones de la empresa McAfee, la cual se amolda al tipo de establecimiento que se busca proyectar. Dicha visita fue guiada por el Ingeniero Fernando Patrino (Gerente de infraestructura de la empresa), quien brindó acceso a información sobre todo lo que se necesitaba para obtener un diseño acorde y nos proporcionó sus valoraciones personales de lo que se busca hoy en día a la hora de armar espacios de trabajo sobre oficinas de estas características.

La empresa de Software se ubica actualmente en el predio de Ciudad Empresaria, sobre la Av. Voz del Interior. En dicho predio se encuentra el Hotel Quorum y alberga distintas empresas y consultoras en sus edificios como la visitada o Mercado Libre.

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A partir de la experiencia laboral del ingeniero, se tomaron ciertos parámetros como obligatorios a la hora de diseñar edificios de estas características. Por ejemplo, se desecha el modelo jerárquico antiguo en donde se brinda una cantidad de metros cuadrados dependiendo de la posición que ocupa el empleado según el organigrama; desde gerentes, jefes y empleados teniendo una superficie de trabajo mínima de 10, 5 y 2,5 m² respectivamente por puesto.

Actualmente, los modelos de informática surgen de las revolucionarias organizaciones y empresas americanas. Desde McAfee hasta Microsoft, la modalidad desprecia la cadena de mando (para el diseño) por la noción de equipos de trabajo. Por lo tanto, la superficie que ocupa cada empleado se toma general con un mínimo de 8 m² (aunque se recomienden números mayores). Según el ingeniero se estima un mínimo de 10 m² y para empresas como ésta unos 14 m² serían óptimos para que el empleado se sienta cómodo. Esta superficie se distribuye entre: baños, salas de reunión, cafeterías, escritorios, etc.

Una premisa fundamental que se presenta en las instalaciones es el diseño modular. Esto es, ubicar todos los elementos estructurales fijos (columnas, vigas y/o muros) de tal forma que las modificaciones que puedan necesitarse sean lo más simples posibles y así evitar las situaciones que comprometan la operatividad por estar limitados físicamente. Para esto, se utiliza el diseño de planta libre (sin cerramientos internos, solo perimetrales) para permitir cualquier modificación que se necesite a futuro.

Además de la planta libre, la siguiente necesidad básica en este tipo de edificios es la de las salas de reunión. El concepto de oficina queda descartado para dar mayor facilidad entre empleados y jefe de un cierto proyecto al ponerlos en la misma área de trabajo. Sin embargo, la privacidad sigue siendo necesaria para realizar llamadas, reunirse con clientes, o simplemente orientar la jornada laboral en el grupo de trabajo. Las salas de reunión se dividen en diversos tipos y en diversas funciones, respetando como mínimo 1 m² por ocupante. Las principales siendo:

- Phone Booth (cabina de teléfono): de 1 ocupante y sin necesidad de reserva.
- Small meetings (pequeñas reuniones): de 3 a 4 ocupantes y sin necesidad de reserva, reuniones rápidas.
- Meetings (reuniones): de 6 a 8 ocupantes y con reserva necesaria.
- Training Room (sala de capacitación): de 12 o 24 utilizada para instruir a los empleados en lo que se necesite.

Las mismas deben plantearse de manera modular para permitir su modificación de ser necesario. Un ejemplo claro que se pudo observar fue que las Phone Booth no eran muy utilizadas, pero al estar en línea en vez de apiladas como rectángulo estas no podrían transformarse en una Small meetings, las cuales son mucho más utilizadas.

La segunda premisa fundamental dentro de este tipo de edificaciones y que se notó fuertemente en las oficinas es su habitabilidad. Esto hace referencia a factores como la acústica, las distancias, la comunicación entre espacios y la integración de los mismos a los equipos de trabajo. El requerimiento fundamental de los nombrados previamente, señalado en la visita, es la

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acústica. Esta debe absorber la mayor cantidad de sonidos generados por el trabajo diario, facilitando a los empleados concentrarse en sus tareas y evitando que grupos de trabajo con distintas tareas se molesten.

Para esto, es indispensable el uso de alfombras, una capa acústica en el cielorraso, pantallas que dividen las áreas de trabajo (acolchonadas con material absorbente de sonido), cortinas, etc. En el caso de las salas de reunión se las construye con la modalidad en seco, utilizando planchas de yeso (nombre comercial “Durlock”) las cuales se montan desde un esqueleto metálico a ambos lados con las placas mencionadas. Entre ellas y el esqueleto se coloca una capa de lana de vidrio que absorbe las ondas acústicas agudas y medianas y por último, hacia el interior de la sala de reunión, después de la primera placa, se coloca una goma espesa (absorbiendo las ondas graves) y una última placa de yeso cerrando el muro.

Las instalaciones se deben realizar a través del cielorraso, de esta forma se facilita la colocación y posterior reparación sin generar mayores perturbaciones al resto de la planta. Esta premisa se combina a la vez con un cuarto solo orientado a “racks informáticos”; estos son bibliotecas donde se posicionan los diversos componentes electrónicos necesarios para generar una red interna conectando los diversos equipos. El mismo se combina a su vez con el sector de electricidad y toda la habitación debe ser propiamente acondicionada para regular el calor que estos componentes generan.

La última premisa que se destacó de esta visita es la orientación del edificio y el método constructivo. Si bien la premisa arquitectónica de edificaciones con fachada de vidrio o “curtain wall” es muy utilizada en edificios de estas características, las desventajas de tener solo vidrio son notables a la hora de armar los espacios. Los escritorios no pueden apoyarse sobre el mismo y el sol encandila lastimando los ojos de los empleados y dificultando la visión de las máquinas.

III. 3. - LINEAMIENTOS/PREMISAS DE DISEÑO

Al momento de comenzar a diseñar el edificio planteado, se decidió determinar ciertas normas o lineamientos a seguir para que el mismo quede de acuerdo a las expectativas.

Como primera premisa, las dimensiones de la planta se establecieron a partir de la distribución de puestos de trabajo, es decir proceso opuesto a como se realiza generalmente. De esta manera se garantizará la optimización de los espacios, evitando que los elementos estructurales intervengan de alguna manera en esta medida.

Otro punto a tomar en cuenta fue que la planta debía ser lo más libre posible dentro de la viabilidad estructural. Esto se debe a que se proyecta un edificio adaptable y versátil a las necesidades de cualquier empresa que quiera establecerse en el mismo. De esta manera, los divisorios internos de cada planta serían de materiales del tipo “secos” como placas de yeso, hierro, etc.

Por otro lado, se tomó en cuenta que los núcleos húmedos de la edificación se ejecutarían en el interior y que las cajas de ascensores y escaleras se encontrarían en los laterales.

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III. 4. - DISEÑO ARQUITECTÓNICO Y DISTRIBUCIÓN

En este apartado se describirá en detalle todas las decisiones y premisas utilizadas para diseñar de forma integral, inteligente y acorde a las necesidades de la industria el edificio abocado a las TIC's. Para las mismas, el proyecto se basó en el modelo de diseño inteligente americano. Estas no son normas sino el comportamiento estándar de las empresas más exitosas en el rubro como pueden ser Facebook, Google, McAfee, etc. Las premisas fundamentales y que no deben ser obviadas en ningún instante son, la definición modular de la planta, la insonorización del ambiente, accesibilidad y facilidad de movimiento del personal, la comodidad y relax del personal, y las instalaciones necesarias como servidores y salas de reunión.

Cuando se habla del formato modular de planta se hace referencia a que todo lo realizado debe poder ser modificado con medidas estándar para formar algo nuevo que se necesita. Por ejemplo, reemplazar una sala de reunión de 8 personas por 1 de 4 y 4 Phone Booth (cabinas de teléfono). La intención es lograr que cualquier empresa con la mínima modificación logre adaptar el espacio planteado a sus necesidades particulares. Es de vital importancia la flexibilidad de espacios y por eso se define como metodología de construcción el sistema "Durlock", el cual consta de un esqueleto metálico donde se montan las placas de yeso. Este sistema permite modificaciones de forma muy simple y sin necesidad de anular las operaciones. Al ser obra en seco no se necesita de tiempos de fragüe ni revoques que molestan demasiado las operaciones de trabajo. Solo debemos esperar que se seque la pintura. La forma específica de confeccionar el "Durlock" para oficinas con gran insonorización es a partir de un esqueleto metálico dentro del muro donde se montan las placas de yeso. Se plantea como combinación 3 placas; 1 en el exterior seguida del esqueleto y una lana de vidrio que absorbe las ondas acústicas medias y altas (agudas). Luego se ponen 2 placas de yeso intercaladas por una goma más densa capaz de absorber las ondas acústicas más graves.

La acústica sería el segundo ítem de alta importancia. Es vital para un trabajo eficiente que el sonido ambiente sea absorbido lo máximo posible y que no se transmitan sonido dentro o fuera de las salas de reunión. Así brindando gran privacidad, y posibilita a los empleados concentrarse en sus tareas. Esto se logró utilizando los muros de placa yeso previamente mencionados y además se los proyecta con una altura mayor a la de cielo raso. Esto es para que el sonido no pase desde las bocas de luz o simplemente por los paneles hacia las salas, escapando la contención del muro. Además, como medio de absorber el sonido toda la planta se la plantea con "moqueta". Es decir, una alfombra que absorbe a su vez el sonido con gran eficiencia. Como último elemento contra el sonido tenemos el cieloraso. Este además de ser la vía por la cual se pasan todas las instalaciones eléctricas y de aire acondicionado, se le agrega arriba el esqueleto metálico, una capa de fibra de vidrio que como mencionamos previamente absorbe en gran medida las ondas acústicas.

Las estaciones de trabajo deben responder a las modalidades modernas sin oficina y de trabajo en equipo. La organización debe prever que distintos miembros del personal deben poder acercarse, charlar y discutir pequeños arreglos en el día a día. Por lo tanto, una buena circulación es vital para permitir el correcto desempeño de las actividades. Con esto en mente se realiza un

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muro perimetral de 0.8 metros de altura. Este muro permite apoyar los escritorios contra la pared y así armando áreas de trabajo radiales. Las mismas son las más cómodas a nivel de circulación y sonido. Todo el sonido está dirigido hacia afuera de las áreas de trabajo sin invadir otras. Se planteó una gran circulación con pasillos altos y sin columnas que entorpezcan el paso.

La planta general fue pensada para una empresa de 125 empleados con su respectivo escritorio además del personal de limpieza. Sin embargo, debido a la buena distribución de espacios se llegó a adaptar la plata para alojar a 127 empleados. Dejando así 2 lugares para capacitación además de los empleados regulares. Además, la planta puede ser modificada para el uso de 2 empresas de la mitad de empleados ya que se realizaron 2 núcleos de baños distanciados entre sí. O puede adaptarse a las nuevas modalidades del coworking, situaciones que escapa el análisis de este trabajo. Así mismo la planta cuenta con 4 salas de reunión tipo A y 2 tipo B para reuniones privadas y capacitaciones laborales. Cuenta con 4 módulos de trabajo distintos. Los mismos son 3 módulos de 8; 1 módulo de 11; 4 módulos de 18 y 1 de 20. Finalmente se incluyeron en el diseño una cocina y un comedor de 63 personas denominado SUM, un depósito de limpieza y repuestos, así como un lobby y un bloque para la ubicación de electricidad y servidores necesarios. Debido a que aún existen empresas que buscan tener gerentes de alta jerarquía en oficinas se plantea una alternativa a la planta típica donde se modifica el núcleo de trabajo de menor ocupación y se lo reemplaza por 3 oficinas de alta gerencia. A continuación, se describe brevemente cada uno de los espacios, así como las razones para su uso.

Las salas de reunión se presentan como elemento fundamental y de alta demanda en este rubro. Esto es ya que son el punto de mayor privacidad de la empresa, ya sea para realizar llamadas, reuniones con clientes, reuniones del grupo de trabajo o juntas de capacitación. Por esto las salas constan generalmente de 1, 4, 8 o 20 personas como máxima ocupación. En el contexto actual con el avance tecnológico y el nivel de demanda que se necesita para un proyecto estándar las salas de baja ocupación (1 y 4 ocupantes) ya no son demandadas. Es por esto que en el diseño propuesto no fueron incluidas y solo se presentan 2 variantes, las salas A y B de 8 y 20 ocupantes respectivamente. Aun así, y siempre cuidando la flexibilidad de diseño por, sobre todo, la característica modular del edificio permite dividir una sala de 20 ocupantes en 2 de 8 y a su vez dividir la de 8 ocupantes en 2 de 4 y a su vez las de 4 en salas de 1, también llamadas Phone Booth. Recordemos que esta industria es global y por lo tanto todas las salas de reunión deben contar con

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la insonorización y un teléfono de llamadas internacionales vía internet para coordinar esfuerzos en todo el mundo sobre las mismas temáticas.

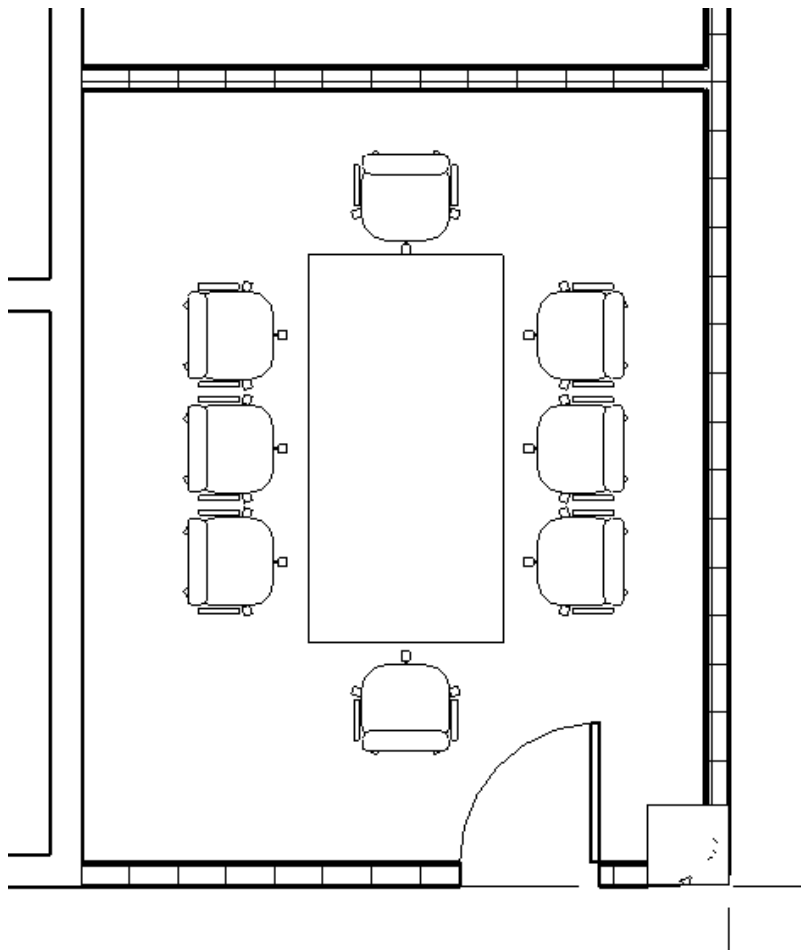


Ilustración 14 – Sala de reunión A

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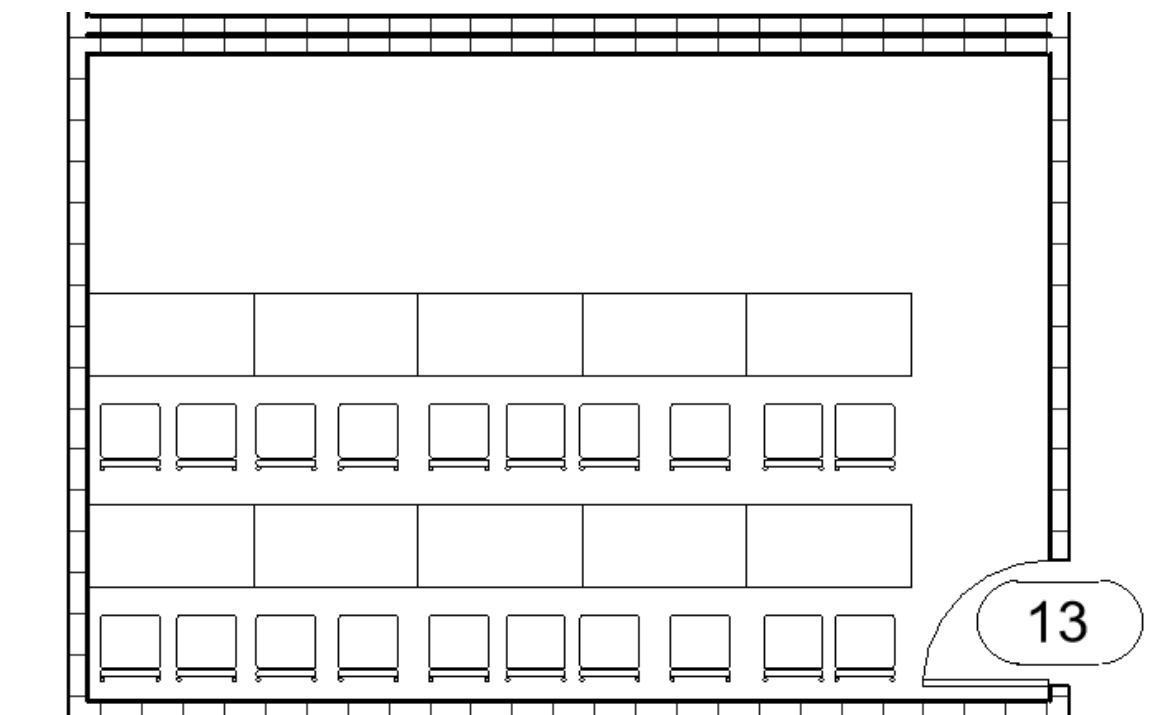


Ilustración 15 – Sala de reunión B

Los núcleos de trabajo son la zona laboral principal. La flexibilidad en este ambiente es sumamente complicada ya que los equipos de trabajo tienen una gran rotación anual. Se definió por grandes y pequeños grupos de trabajo que a su vez pueden ser subdivididos en 2 semi-núcleos. Para la comodidad y mejor eficiencia de la fuerza de trabajo se definieron los núcleos en forma de anillo alrededor del perímetro del edificio. Esto mejora la iluminación, la accesibilidad y movilidad de los empleados. Los núcleos se dividen, como se puede observar en las imágenes siguientes, en grupos de 8, 11, 18 y 20. Cada uno a su vez divisible por la mitad. Los mismos constan de una silla ergonómica y un escritorio de 1,8 metros por persona. Esto permite 2 y hasta 3 monitores por persona (lo usual en la industria) y suficiente espacio para un cómodo trabajo.

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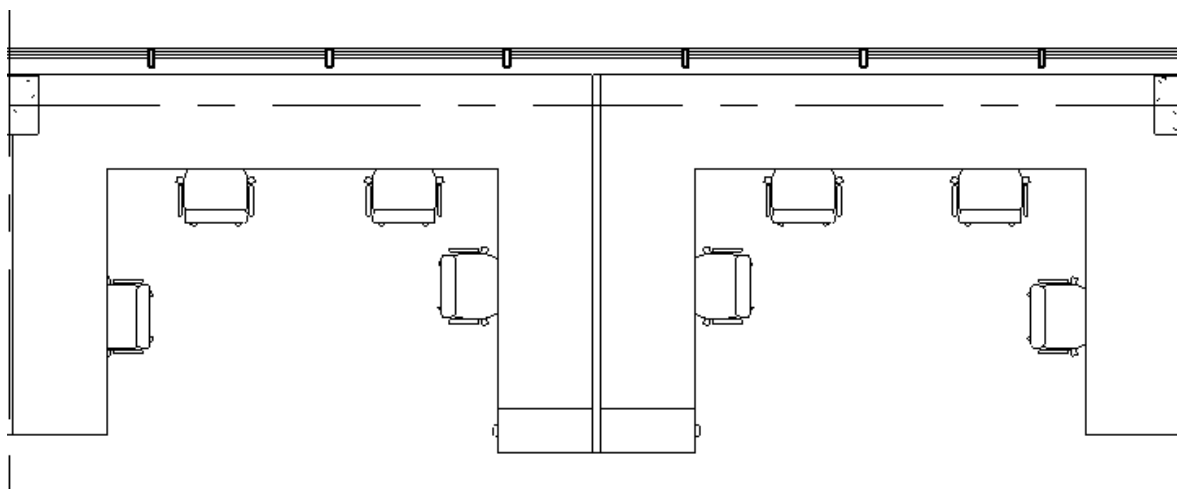


Ilustración 16 – Núcleo de trabajo de 8 personas.

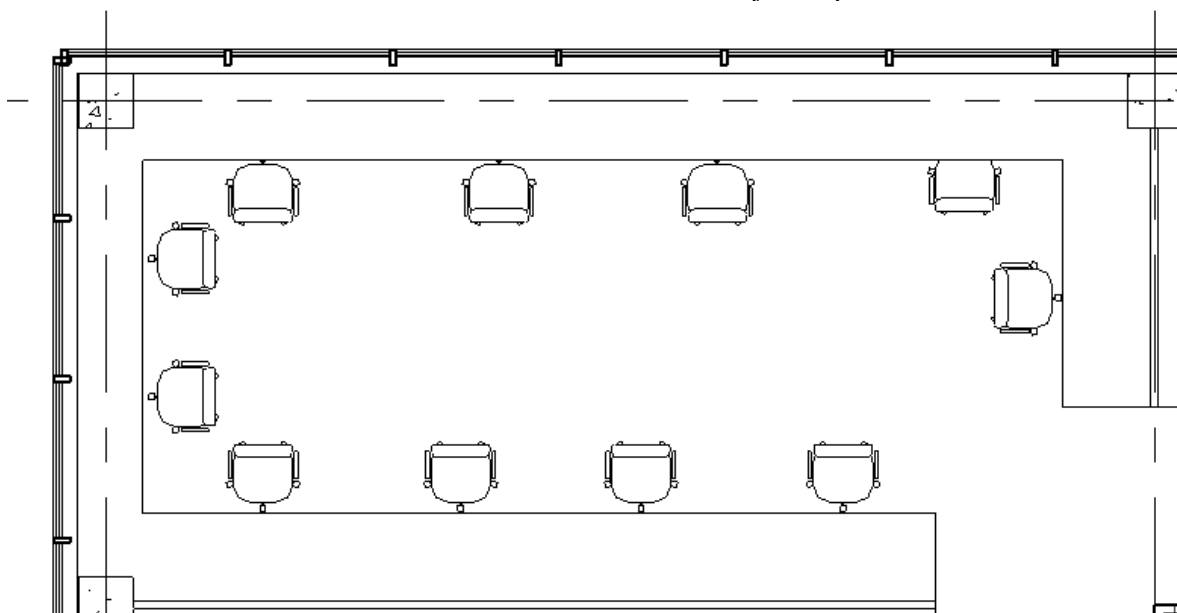


Ilustración 17 – Núcleo de trabajo de 11 personas.

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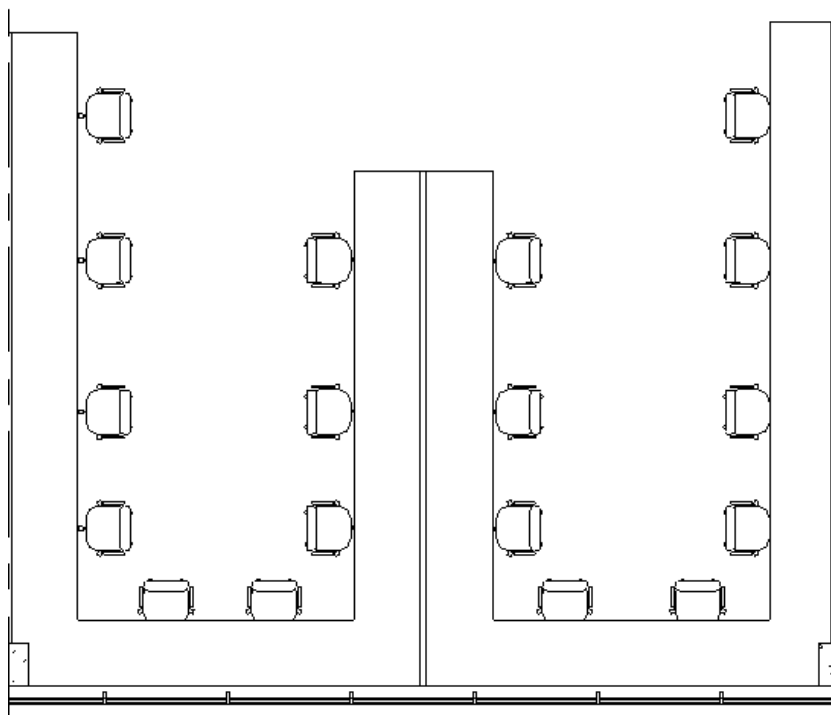


Ilustración 18 – Núcleo de trabajo de 18 personas.

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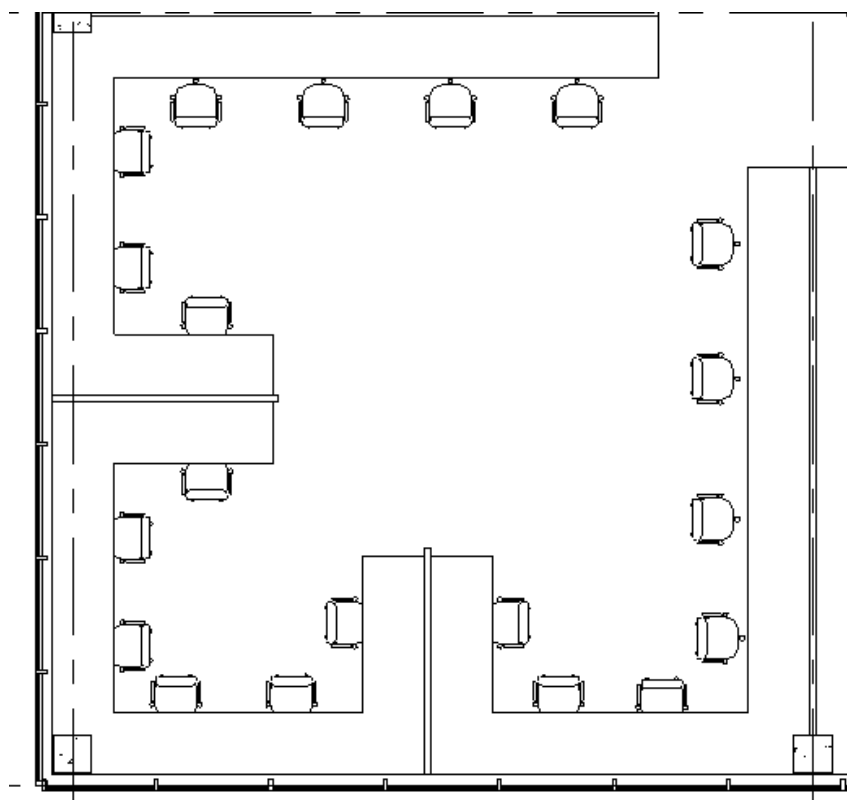


Ilustración 19 – Núcleo de trabajo de 20 personas.

El módulo de baños según norma para el edificio fue dividido en 2 núcleos, cada uno con sus baños para hombres y mujeres, así como un baño para discapacitados. El baño de mujeres y de hombres consta de 4 inodoros y bachas por núcleo. Además, al de hombres se le agrega 4 urinarios. La razón de la división del núcleo permite una mayor flexibilidad de la planta como el funcionamiento de más de una empresa por piso. Detrás de los baños se incluye un muro falso siguiendo la totalidad del edificio que funciona como montante para el pasaje de todas las instalaciones.

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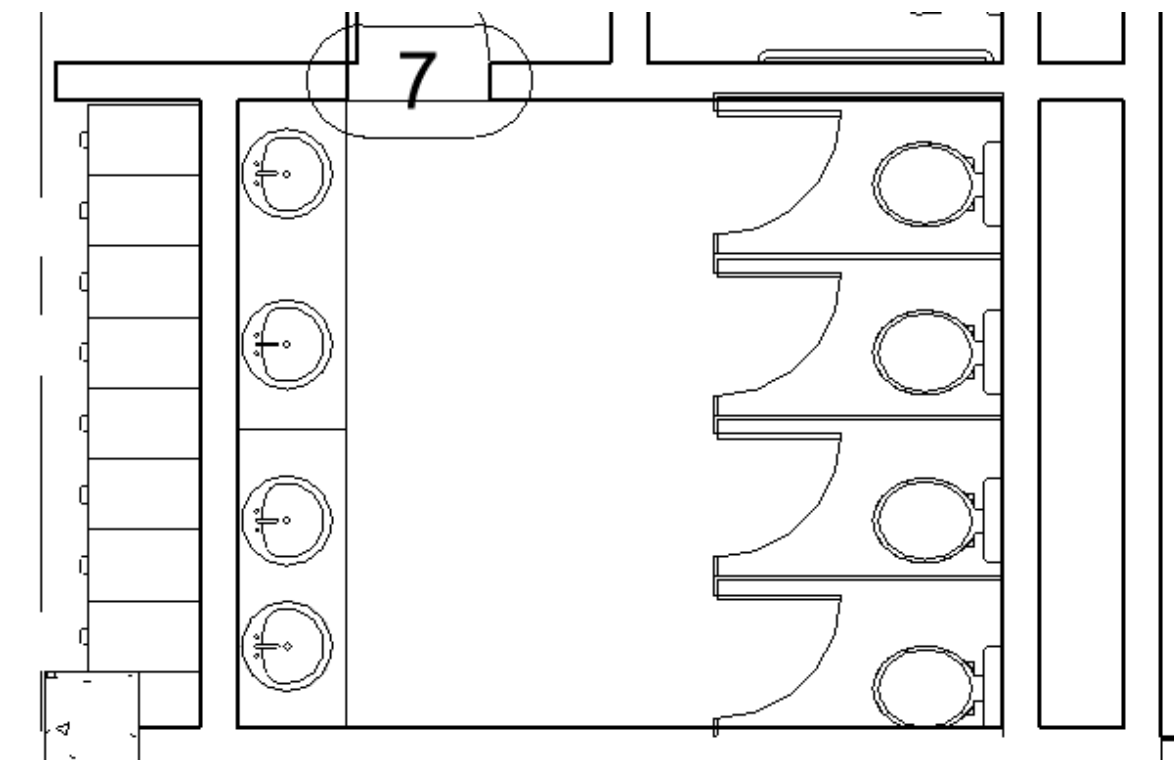


Ilustración 20 – Baño de mujeres.

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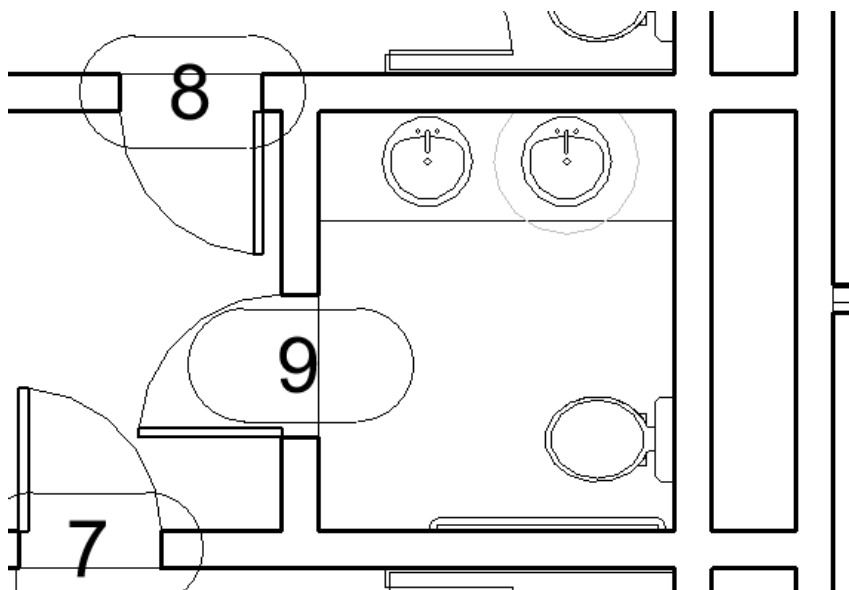


Ilustración 21 – Baño de discapacitados

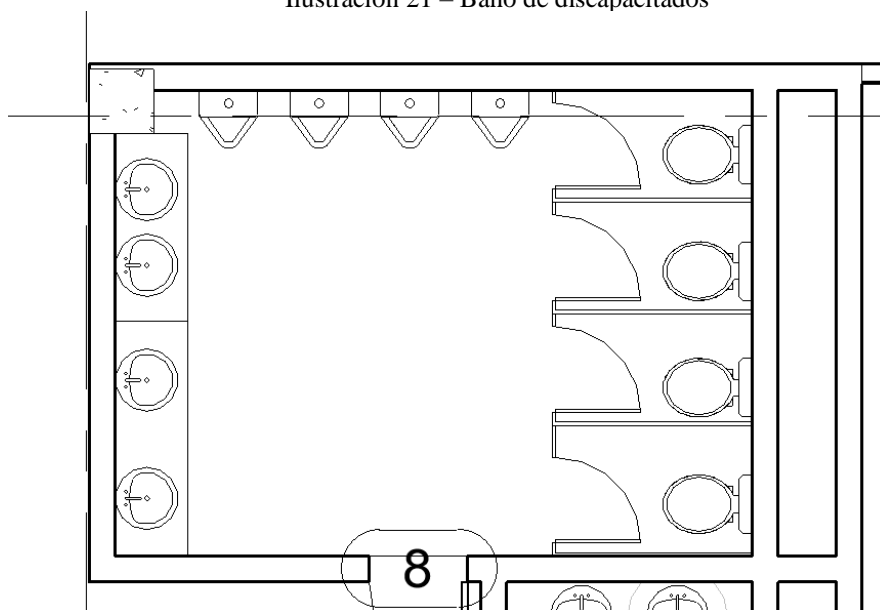


Ilustración 22 – Baño de hombres.

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Se agrega al diseño una sala común denominada SUM donde los empleados podrán comer y a su vez pueden realizarse grandes capacitaciones a la fuerza laboral. Se diseña de tal forma que se pueda dividir el turno de comida en 2 turnos. Además, se agrega una cocina con heladeras de gran capacidad y suficiente espacio para manipular alimentos.

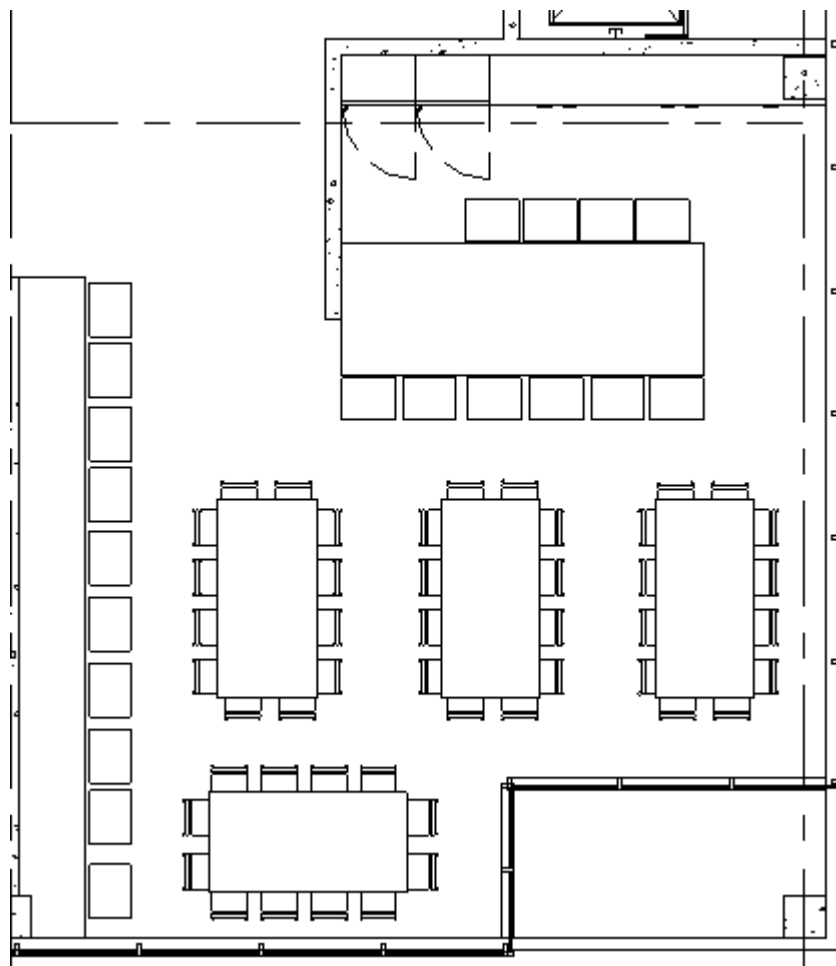


Ilustración 23 – SUM y Cocina.

De los detalles típicos de este rubro no podían faltar, el Play Room, zona de relax de la fuerza laboral que puede ser amoblado como la empresa mejor lo desee y sirva a la fuerza laboral. El mismo está dispuesto próximo a los depósitos y el SUM para evitar molestar a la fuerza laboral mientras trabaja. Se posee un almacén de insumos y depósito de limpieza, así como un cuarto de

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electricidad con servidores. En lo que respecta al Lobby o recepción de la empresa se tiene un escritorio para una secretaria/recepcionista y sala de espera para los visitantes.



Ilustración 24 – Play Room.

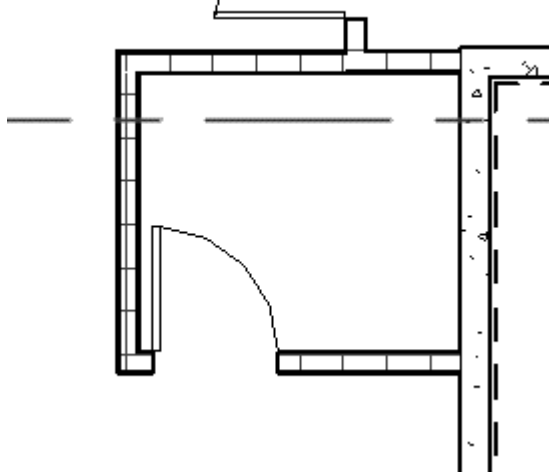


Ilustración 25 – Deposito y Almacén.

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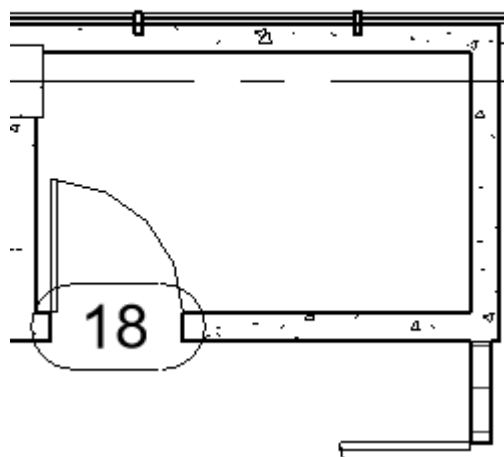


Ilustración 26 – Sala de electricidad y servidores.

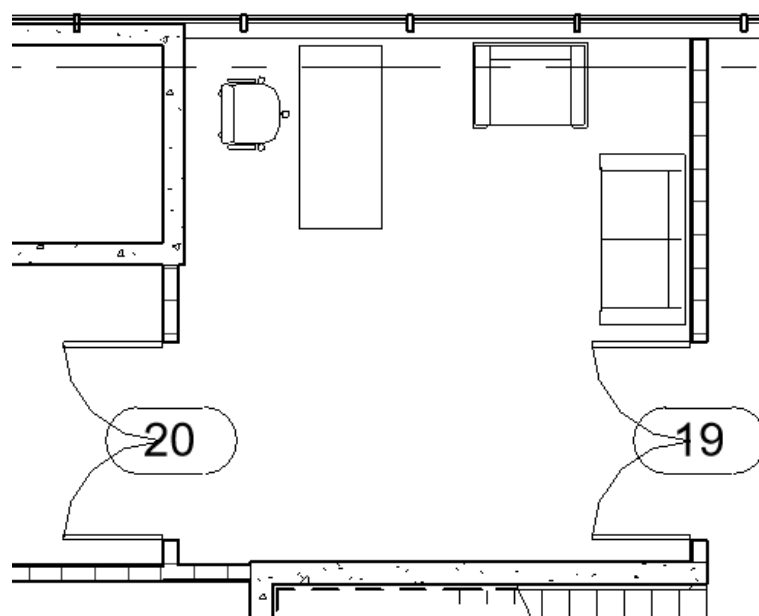


Ilustración 27 – Lobby/Recepción.

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Como último detalle se muestra las oficinas diseñadas para la alta gerencia. Las mismas constan de un gran secretorio, un mueble para almacenamiento de información, 2 sillas para visitas, entre otros. La razón de esto es como siempre la flexibilidad del edificio.

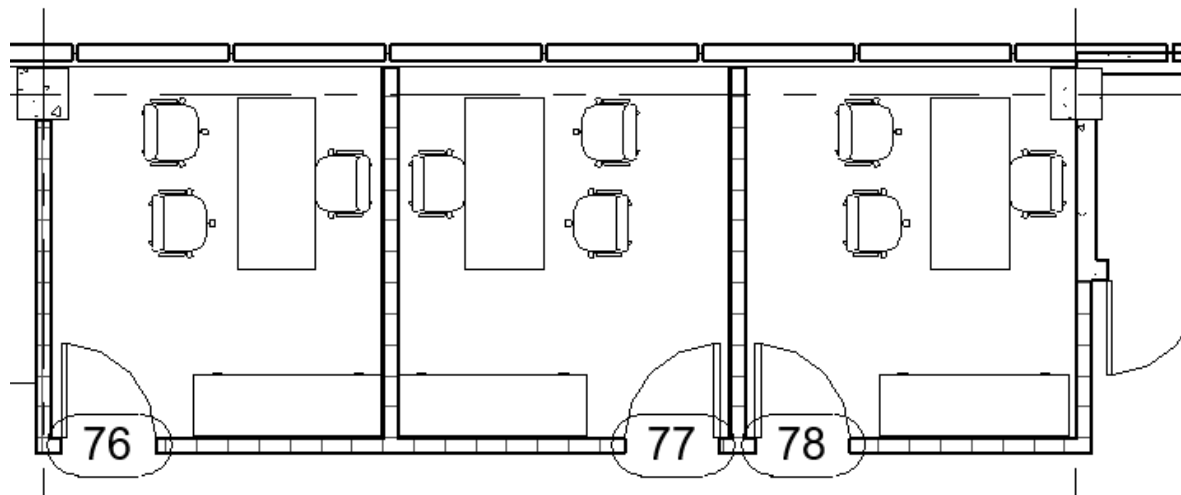


Ilustración 28 – Alternativa oficinas gerencia.

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III. 5. - DISEÑO ESTRUCTURAL

El objetivo de un proyecto estructural es obtener una estructura económica, segura y factible, que cumpla con los requisitos funcionales y estéticos fijados en las premisas. El mismo, es por ello una mezcla equilibrada de ciencia y arte. El proyectista de estructuras debe tener un conocimiento completo (científico e intuitivo) de la estética, la mecánica, la dinámica y el análisis estructural; de las propiedades de los materiales estructurales y de su respuesta frente a las solicitaciones; de la relación entre la función, distribución y forma de los elementos estructurales y la estructura en su conjunto; debe tener también una apreciación clara de los valores estéticos y funcionales que deben ser destacados o satisfechos por la estructura; y finalmente un conocimiento de las técnicas constructivas, de la tecnología del medio y de los costos relativos.

La estructura se compone por los elementos del edificio encargado de resistir las solicitaciones o cargas a las que éste se somete y transmitir las al suelo de apoyo. Puede diferenciarse en ésta una parte superior llamada “Superestructura” y una parte inferior llamada “Fundación”.

El diseño estructural del presente edificio se compone de estructuras independientes de hormigón armado, ya que satisface la necesidad de cargas a sostener.

Durante el transcurso de la carrera de ingeniería civil, se han cursado diversas asignaturas relacionadas a las estructuras, desde análisis estructurales para distintas composiciones de cargas, fuerzas y deformaciones, materiales y cómo se comportan hasta cálculos estructurales en específico para distintos materiales como hormigón armado, metales, madera y determinar el funcionamiento de cada tipo en diversos escenarios y condiciones como vientos, sismos, etc. Sin embargo, al momento de calcular edificios, en su mayoría se analizaron los elementos aislados del conjunto y esto conlleva errores ya que las estructuras en la realidad son un todo.

Por esta razón el grupo optó por calcular el proyecto en dos partes, por un lado, el cálculo de la fundación se realizó mediante planillas de Excel y metodologías de cálculo vistas en las asignaturas de Geotecnia III y por otro, la superestructura mediante un software para obtener el resultado del conjunto. Esto es necesario ya que permite prever la respuesta que este tendría en situaciones extremas (cargas de sismo, viento y combinación de permanentes y sobrecarga).

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III. 5. 1. - FUNDACIONES

Toda estructura está en contacto con el suelo y debe transmitir las cargas a él debidamente. El suelo puede ser considerado un material más, pero de una resistencia menor a la de otros componentes de las estructuras, por lo cual se busca aumentar la superficie de contacto y así disminuir la tensión que recibe.

La realización de un estudio de suelos es muy importante para conocer las siguientes características:

- a) Los parámetros resistentes: conocerlos permite diseñar adecuadamente las fundaciones.
- b) La consistencia: Para llegar a la cota de fundación hay que prever los métodos y equipos necesarios, según la consistencia del suelo.
- c) La homogeneidad: O la falta de ella, conjuntamente con la deformabilidad del mismo permiten prever la posibilidad de asentamientos diferenciales y tomar los recaudos estructurales correspondientes.
- d) Nivel de la napa freática: si se encuentra por encima de la cota de fundación, puede significar impedimentos técnicos y económicos. En muchos casos, sobre todo en suelos de tipo granular con altas permeabilidades, aunque las características resistentes permitan pensar en una fundación directa, se opta por cambiar a una de tipo indirecta por este condicionante.
- e) Agresividad del suelo: De este parámetro dependerá el recubrimiento necesario de las armaduras, si se proyectan hormigones especiales con cementos resistentes a las agresiones y/o la incorporación de adiciones activas.

En el presente trabajo se comienza por el análisis de las cargas que llegan a la fundación de edificio, luego se procede a examinar el estudio de suelos, elegir el tipo de fundación y finalmente se calculan los cimientos del edificio y sus correspondientes planos de fundación.

i) Fundaciones Profundas o Indirectas

La elección de fundaciones de tipo profundas o indirectas es el resultado se basa en la calidad del suelo de fundación. Cuando los mantos superiores del suelo no tienen la capacidad suficiente para recibir las cargas provenientes del edificio por su falta de valor soporte o por su deformabilidad, se debe recurrir a fundaciones de tipo profundas, que permiten disipar las cargas en mantos a mayor profundidad ya que sus mecanismos de transferencia son distintos que los de las fundaciones superficiales.

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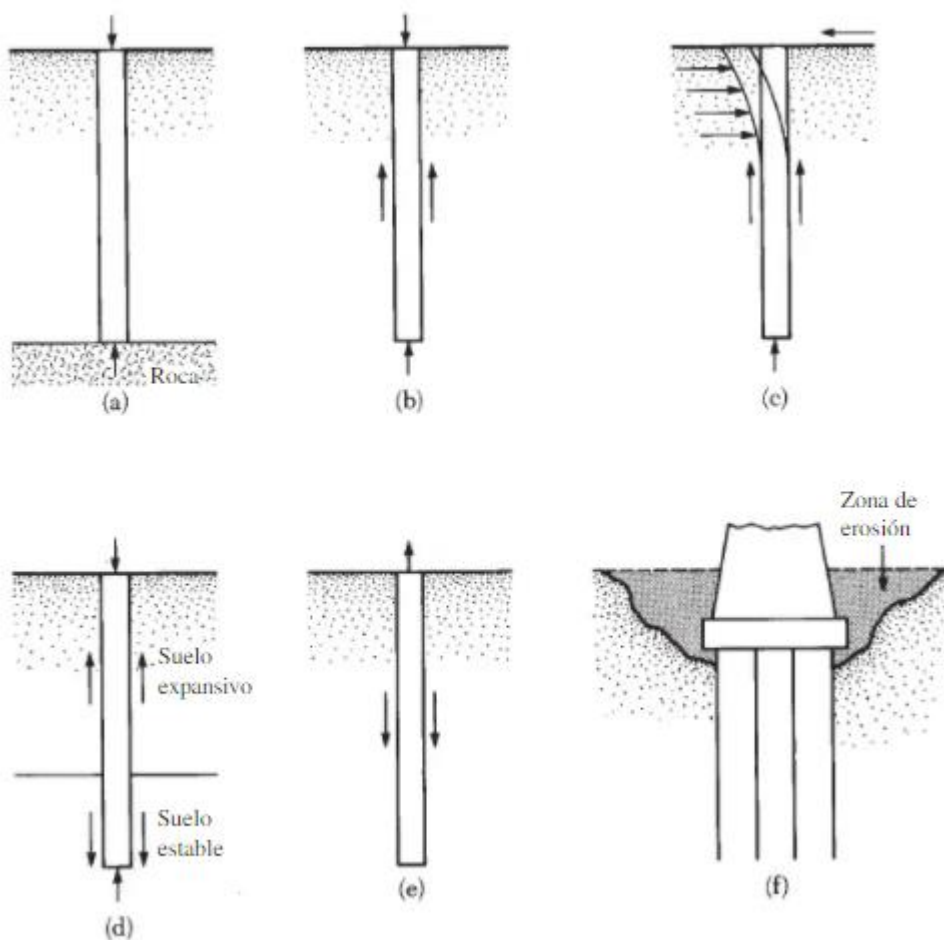


Ilustración 29- Condicionantes para la utilización de fundaciones indirectas

Los pilotes pueden ser prefabricados e hincados o perforados y hormigonados in situ, este es el caso de los pilotes seleccionados para este proyecto.

ii) Mecanismos de Transferencia de Cargas

Es importante destacar que, a diferencia de las fundaciones superficiales, la carga se transmite al suelo por fricción lateral del fuste (Q_f) y por compresión del suelo en su base (Q_b). Al momento de determinar la capacidad portante se deben tener en cuenta ambos aportes ya que no son simultáneas y necesitan distintos niveles de deformación para movilizarse.

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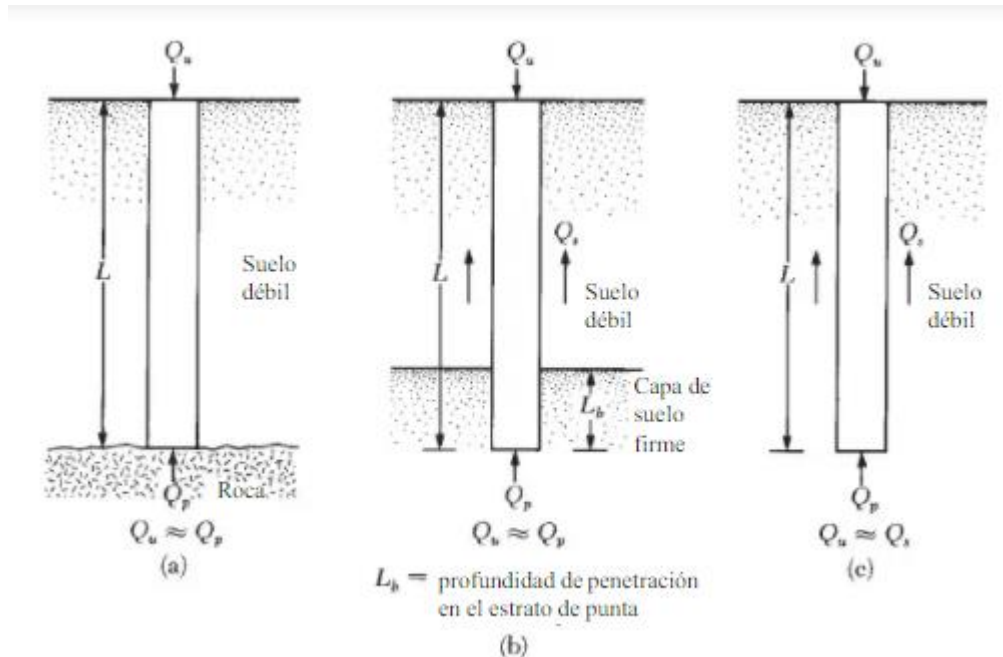


Ilustración 30- Transferencia de las cargas

La carga que produce la falla, carga última, de un elemento de fundación profunda es:

$$Q_u = Q_f + Q_b$$

Donde:

- Q_f carga última por fricción lateral del fuste
- Q_b carga última por compresión de la base

Una vez realizado el análisis del estudio de suelo, se sigue con los cálculos de los pilotes. Finalmente, se representa la información mediante los planos correspondientes a los pilotes, los cabezales y las vigas de fundación. Todo este material gráfico es muy útil a la hora de efectuar la obra propiamente dicha, y ayuda a comprender mejor el resultado de todo el procedimiento realizado con anterioridad.

iii) Resultados del Análisis de Cargas

Por un lado, se deben conocer las cargas que llegan a las fundaciones y que ellas deben soportar, por otro lado, se debe conocer los parámetros del suelo. El programa CYPE mediante el cual se realizó el cálculo estructural arroja los esfuerzos mayorados en planta baja de cada columna y tabique para los casos de carga más desfavorables.

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Tabla 4 - Ejemplo de resultado de cargas de columnas arrojado por CYPE

Column reinforcement																	
Concrete: H-20																	
Column	Geometry			Reinforcement						Worst case forces							
	Floor	Dimensions (cm)	Span (m)	Corner	X Face	Y Face	Steel area (%)	Perimeter	X-Dir. ⁽¹⁾	Y-Dir. ⁽¹⁾	Spacing (cm)	Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)
C1	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	18	DL, LL, E	175.5	-107.9	-96.7	-69.0	77.7
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	18	DL, LL, E	410.0	113.6	81.5	-69.6	92.2
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	791.9	120.0	115.5	-94.8	98.9
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1115.4	-133.1	-126.3	-100.8	106.1
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1115.4	-133.1	-126.3	-100.8	106.1
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1418.0	-65.8	-64.1	-71.1	74.6
C2	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	18	DL, LL	397.1	-220.5	14.3	10.9	149.2
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	18	DL, LL, E	765.6	181.6	-6.3	5.5	149.9
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1505.8	222.8	-11.8	9.5	184.1
	Floor 2	50x50	3.00/5.40	4020	10012	10012	1.41	1s08	2c08	2c08	14	DL, LL	2086.8	-247.7	13.8	10.7	198.3
	Floor 1	50x50	0.00/2.40	4025	6016	6016	1.75	1s08	1c08	1c08	19	DL, LL	2631.2	208.2	-12.7	8.4	138.1
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	2648.9	-123.2	7.5	8.4	138.1
C3	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	18	DL, LL	379.6	-221.3	-3.7	-2.9	150.9
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	18	DL, LL	912.1	223.7	1.7	-1.6	186.5
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1460.8	220.0	2.2	-1.8	181.7
	Floor 2	50x50	3.00/5.40	4025	2020	2020	1.29	1s08	-	-	24	DL, LL	2027.0	-242.4	-2.1	-1.6	194.3
	Floor 1	50x50	0.00/2.40	4020	4020	4020	1.51	1s08	2c08	2c08	24	DL, LL	2552.6	202.6	1.7	-1.2	134.5
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	2570.2	-120.2	-1.2	-1.2	134.5

En esta información se basa la definición de los pilotes, agrupándolos en categorías según su carga. Las dos variables principales que se tienen en cuenta son la carga de compresión (N) y el momento flector (Mxx y Myy). Ambos son críticos en elementos tan esbeltos como los pilotes y serán tenidos en cuenta tanto en el cálculo geométrico como estructural.

- TIPO 1: carga Normal N de 2000 (KN) a 2700 (KN), momento flector máximo Mf hasta 125 (KN.m)
- TIPO 2: carga Normal N de 1000 (KN) a 2000 (KN) , momento flector máximo Mf hasta 80 (KN.m)

iv) Cálculo de Fundaciones

▪ Método de Terzaghi

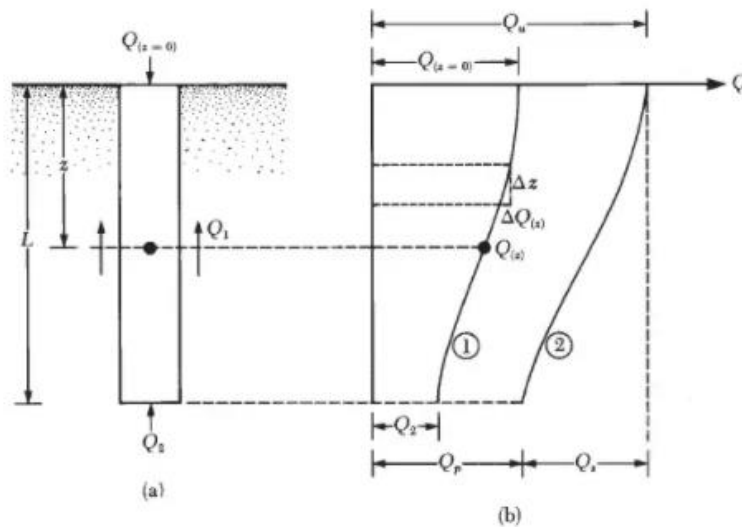
La capacidad de carga última de un pilote, Q_u , está dada por la carga tomada en la punta del pilote más la resistencia total por fricción superficial en la interface suelo – pilote:

$$Q_u = Q_p + Q_f$$

Siendo:

- Q_u : Capacidad de carga última del pilote.
- Q_p : Capacidad de carga en la punta del pilote.
- Q_s : capacidad de carga por fricción en el fuste del pilote.

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▪ **Capacidad de carga de la punta del pilote, Q_p :**

$$Q_p = \sigma_{adm} * A_p$$

Siendo:

- σ_{adm} : tensión admisible del suelo a compresión.
- A_p : Área de la punta del pilote.

A su vez la tensión admisible del suelo por punta es:

$$\sigma_{adm} = \frac{\sigma}{V_1}$$

Siendo V_1 un coeficiente de seguridad que varía entre 3 y 4 dependiendo de la incertidumbre de los datos.

La tensión σ se calcula de la siguiente manera:

$$\sigma = 1.2 c * N'c + \gamma_{arr} * l_p * N'q + 0.6 * \gamma_{ab} * r * N\gamma$$

Siendo:

- $N'c$, $N'q$ y $N\gamma$: factores adimensionales de capacidad portante adecuados a los pilotes, función del ángulo de resistencia al corte del suelo (ϕ)
- c : cohesión del suelo.
- l_p : longitud del pilote.
- r : radio del pilote.
- γ_{arr} : densidad del suelo situado por encima de la punta del pilote.

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- γ_{ab} : densidad del suelo situado debajo de la punta del pilote.

En el caso de pilotes perforados por ser tipo de falla local se utilizan los coeficientes N'_c , N'_q y N'_γ , en vez de N_c , N_q y N_γ .

- **Capacidad de carga por fricción, Q_f :**

$$Q_f = \tau_{adm} * A_f$$

Siendo:

- τ_{adm} : Tensión admisible del suelo por fricción.
- A_f : superficie de contacto del pilote con el suelo que lo rodea.

A su vez la tensión τ_{adm} admisible del suelo por fricción es:

$$\tau_{adm} = \frac{\tau}{v_2}$$

Siendo v_2 un coeficiente de seguridad que varía entre 1.5 y 2 dependiendo de la incertidumbre de los datos.

v) Estudio de suelos

El estudio de suelos en el cual se basa el presente trabajo a la hora de realizar el cálculo de las fundaciones fue realizado por la Universidad Católica de Córdoba y especifica los valores de σ y τ del suelo que son utilizados para calcular la capacidad por punta y la capacidad por fricción en el fuste respectivamente.

vi) Cálculo geométrico

Para simplificar el diseño, el cálculo y la construcción de las fundaciones se utilizan solo dos tipos de pilotes ya que las solicitaciones que llegan a las columnas no varían mucho entre las más cargadas y las menos cargadas.

En la siguiente tabla se resume las características de cada tipo de pilotes:

Tabla 5-características de cada grupo de pilotes

	Carga Máx [KN]	Carga Máx N [tn]	Momento flector Máx Mf [tnm]	Diámetro adoptado [m]
TIPO 1	2700	275,3	125	0,90
TIPO 2	2000	203,9	80	0,70

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La cota de fundación de todos los pilotes es de -15m, la misma fue definida teniendo en cuenta el estudio de suelos provisto por la UCC y ponderando esa información con otros estudios de suelo de barrios lindantes. Se considera dicha longitud desde la profundidad de la cota del estrato resistente, ya que, acorde al estudio de suelos, el resto de las capas de suelo no poseen una tensión friccional suficiente como para ser considerados.

El diámetro se obtiene en base a la capacidad de carga necesaria para cada tipo de pilotes que debe ser mayor a la Carga máxima, y el procedimiento de cálculo es el siguiente:

1. Se define la cota de fundación que determinará la longitud del pilote
2. Se estima un diámetro para cada tipo de pilote (primera iteración)
3. Se calculan los restantes parámetros geométricos que dependen de éstos (perímetro, área del fuste, área de la punta)
4. Con las fórmulas del apartado “iv) Cálculo de Fundaciones” más atrás se calcula la Capacidad de carga de la punta del pilote, Q_p
5. Con las fórmulas del apartado “iv) Cálculo de Fundaciones” más atrás se calcula la Capacidad de carga por fricción, Q_f
6. La capacidad de carga última Q_u será la suma de las anteriores.
7. Si no es suficiente Q_u , se aumenta el diámetro del pilote, hasta llegar a adoptar un diámetro apropiado.

Tabla 6 – Definición de la geometría de cada grupo de pilotes

	TIPO	1	2
PARAM GEOM.	Perímetro (m)	2,83	2,20
	Long (m)	15	15
	Diametro (m)=	0,90	0,70
POR PUNTA	$A_p(m^2)=$	0,64	0,38
	$\sigma_p(t/m^2)=$	100,00	100,00
	v_1	1,50	1,50
	$\sigma_{padm}(t/m^2)=$	66,67	66,67
	$Q_p(tn)=$	42,39	25,64
POR FRICCIÓN	$A_f(m^2)$	42,39	32,97
	$\tau(t/m^2)=$	20,00	20,00
	v_2	3,50	3,50
	$\tau_{adm}(t/m^2)=$	5,71	5,71
	$Q_f(tn)=$	242,23	188,40
$Q_{adm}(tn)$		284,62	214,04

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▪ Verificación

La capacidad última de carga del pilote (Q_u) debe ser mayor o igual a la carga proveniente de la superestructura (N) más el peso del pilote (W) menos el peso del suelo extraído en la excavación (densidad por volumen).

$$Q_u = Q_f + Q_p > N + W - \gamma \cdot A_p \cdot Long$$

Se muestra en la siguiente planilla la verificación para cada tipo de pilotes.

Tabla 7- Verificación de la geometría de cada pilote

Tipo	1	2
Diametro (m)	0,90	0,70
A _p (m ²)	0,64	0,38
Long (m)	15	15
γ suelo (t/m ³)	1,7	1,7
γ Hormigón (t/m ³)	2,40	2,40
W -peso pilote (tn)	22,89	13,85
$\gamma_s \cdot A_p \cdot Long$ (tn)	16,21	9,81
N (tn)	275	204
N + W - $\gamma \cdot A_p \cdot Long$	281,68	208,04
Q fricción (t)	242,23	188,40
Q punta (t)	42,39	25,64
Q_f + Q_p	284,62	214,04
1° term < 2° term	VERIFICA	VERIFICA

vii) Cálculo de armaduras

Para calcular las armaduras de los pilotes, se aplicó un método propuesto por la cátedra de Geotecnia de la Facultad. Para aplicarlo hay que definir los coeficientes β_r (en función del tipo de hormigón) y β_s (en función del tipo de acero), a partir de las siguientes tablas. En este caso se previó un hormigón H-17 y acero ADN 420.

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Hormigón	β_r (t/m ²)	Acero	β_s (t/m ²)
H-11		ADN 220	22000
H-13	1050	ADN 420	42000
H-17	1400	ADN 500	50000
H-21			

Luego hay que establecer los factores de seguridad v_1 y v_2 .

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β_r	1400	t/m ²
β_s	42000	t/m ²
v1	2,10	-
v2	1,74	-

Ya habiendo definido la carga máxima que llega a la fundación y las características geométricas de cada tipo pilote, como su altura y diámetro se puede proceder a la primera verificación que es la del hormigón:

$$\frac{(N_{max} + P_p)}{A_p} \leq \beta_r/v1 \frac{(N_{max} + P_p)}{A_p} \leq \beta_r/v1$$

Siendo:

- N_{max} la carga máxima que llega a la fundación
- P_p : Peso propio del pilote
- A_p : Area de la sección transversal del pilote

Tabla 8- Verificación del Hormigón

VERIFICACIÓN DEL HORMIGÓN		
TIPO	1	2
Diámetro(cm)=	90	70
N_{max} (kg)	275000	204000
b (m)	0,15	0,15
P_p (Kg)=	22890,60	13847,40
A_p (cm ²)	6358,50	3846,50
$(N_{max}+P_p)/F_p$	46,85	56,64
$\beta_r/v1$ (kg/cm ²)	66,7	66,7
$\frac{N_{max} + P_p}{A_p} < \frac{\beta_r}{v1}$	VERIFICA	VERIFICA

Para todos los diámetros verifica, se procede a calcular la armadura longitudinal, que debe cumplir con la armadura mínima de 6 barras de 12mm de diámetro.

$$Fl = 0,006 \frac{Nv1}{\beta_r} > 6\Phi 12$$

Una vez calculado el Fl para cada diámetro de pilote se calcula el n como:

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$$n = \frac{Fl}{A_{barra}}$$

Esto se hace para distintos tamaños de barras de acero, para luego definir cuál emplear.

Tabla 9- Armadura longitudinal para cada tipo de pilotes

$$\frac{N_{max} + P_p}{F_p}$$

Armadura Longitudinal		
TIPO	1	2
Fl (cm ²)	24,75	18,36
Φ	n	n
10	31,51	23,37
12	21,88	16,23
16	12,31	9,13
20	7,88	5,84

Se adoptan:

- Para los pilotes tipo 1: 8 barras de Φ20
- Para los pilotes tipo 2: 9 barras de Φ16

Finalmente, se calcula la armadura transversal, formada por estribos en espiral (Fesp) y el espaciamiento (S). El primer paso es obtener z y Fesp para cada pilote:

$$F_{esp} = \frac{z v 2}{\beta s} \geq 0,002 Fl$$

$$z = \frac{N}{4} \left(1 - \frac{c}{\Phi} \right)$$

El segundo paso es calcular la cantidad n de estribos necesario (esto se hace para distintos tamaños de barras) y a partir de eso se calcula la separación S:

$$n_{esp} = \frac{F_{esp}}{f_e \Phi}$$

$$S = \frac{\Phi}{n_{esp} - 1}$$

La siguiente planilla muestra estos cálculos:

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Tabla 10- Armadura transversal para cada tipo de pilotes

Armadura Trasversal			
Fesp (cm ²)	TIPO	1	2
	z (kg)	68306	50671
	$z.v2/\beta S$	14,15	20,99
	0,002.F1	4,95	3,67
Φ y nesp	Φ	n	n
	6	50,0	74,2
	8	28,1	41,8
	10	18,0	26,7
	12	12,5	18,6
	16	7,0	10,4
Φ y S(cm)	Φ	S	S
	6	1,8	1,0
	8	3,3	1,7
	10	5,3	2,7
	12	7,8	4,0
	16	14,9	7,4

Se definen los diámetros y la separación según lo que se crea más conveniente y teniendo en cuenta que la mínima es $\Phi 6$ cada 20cm, en este caso adoptamos:

- Para los pilotes tipo 1: barras de $\Phi 16$ cada 15cm
- Para los pilotes tipo 2: barras de $\Phi 16$ cada 16 cm

viii) Planos de Estructura de Fundaciones

En el Anexo A250 se grafican tanto los detalles de los dos tipos de pilotes, como el plano de replanteo de pozos.

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III. 5. 2. - SUPERESTRUCTURA

El software elegido para modelar la superestructura resistente del proyecto fue la herramienta CYPE CAD 2015. La misma es una herramienta de cálculo que permite realizar el diseño, cálculo y dimensionado de estructuras de hormigón armado y metálicas, sometidas a acciones horizontales, verticales y hasta de fuego. Para esto, el programa hace uso del método matricial; el cual mediante la utilización de matrices y definiendo las rigideces propias de los distintos elementos el software puede calcular fuerzas o desplazamientos.

El procedimiento de diseño sigue los pasos mencionados:

- Entrada de datos generales.
- Entrada de datos para sismo.
- Entrada de datos de viento.
- Modelado de la estructura.
- Análisis de la estructura.
- Corrección de errores.

A continuación, se detallan los distintos ítems.

III. 5. 2. a.- ENTRADA DE DATOS GENERALES

En la entrada general de datos, se define el código de cálculo que se desea usar y para que estructuras. Puntualmente, se calcula acorde a las exigencias del reglamento CIRSOC 201 – 2005 para estructuras de hormigón armado.

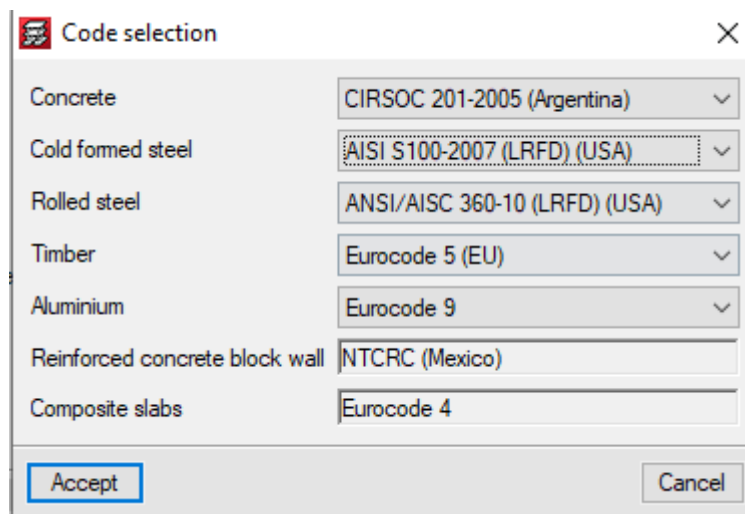


Ilustración 31 – Reglamentos de programa.

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Además, se definen las resistencias características de las estructuras, las cuales se dividen en Floor slabs (Vigas y Losas), Foundation (fundaciones), Columns (columnas) y Walls (muros o tabiques).

General data

Keyword: edificio 2.0

Description: edificio 2.0

Codes: CIRSOC 201-2005, AISI S100-2007 (LRFD), ANSI/AISC 360-10 (LRFD), Eurocode 5 and Eurocode 9

Reinforced concrete

Concrete

Floor slabs: H-30

Foundation: H-20

Columns: H-20

Walls: H-20

Aggregate properties: 15 mm

Steel

Bars: ADN 420

Bolts: A-307

Sections

Steel

Rolled and welded: A36

Cold-formed: ASTM A 36 36 ksi

Timber

Sawn, from conifers or poplars, - C14

Extruded aluminium

EN AW-5083 - F

Loads

Dead and live load

☒ With wind loading: CIRSOC 102-2005 (Argentina)

☒ With seismic loading: CIRSOC 103-1991 (Argentina)

Criteria of reinforcement by ductility: None

Construction elements: Not considered

☐ Check fire resistance

Limit states (combinations)

Additional loadcases (special loads)

Effective length factors

Concrete columns

Kx: 1.000 Ky: 1.000

Steel columns

Kx: 1.000 Ky: 1.000

Environment

Pile caps: A 2

Accept

Ilustración 32 - Definición de parámetros de cálculo.

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III. 5. 2. a. i.- CIRSOC 201-2005 – Estructuras de H°A°

Para evaluar el correcto desempeño de las estructuras al “resistir las solicitaciones”, se las consideran sometidas a dos estados límites. Los reglamentos argentinos CIRSOC se basan en las normas estadounidenses, contemplando el mencionado método semi-probabilístico. Se utilizan dos factores, uno minorra la resistencia de las piezas teniendo en cuenta posibles problemas en la calidad de los materiales y su puesta en obra, y el otro, mayorra las cargas teniendo en cuenta la probabilidad de aumento de las solicitaciones y sus combinaciones

El estado límite último es el mayor estado de solicitaciones considerado para la estructura. Ante este estado de cargas, el edificio debe mantenerse en pie para permitir que sea desalojado. El concepto que prima aquí es el de seguridad de las personas ante la integridad de la estructura. En este estado se mayoran las cargas, afectándolas por coeficientes establecidos según el origen de dicha carga (Muerta, Viva, Viento, Sismo, etc.) conforme a lo dispuesto por el método semi-probabilístico de análisis de estados límites.

El estado límite de servicio es el estado de cargas supuesto para el edificio en condiciones de trabajo normales. Ante este estado se deben verificar los siguientes aspectos:

- Las deformaciones no deben ser excesivas para evitar que sean visibles a simple vista u ocasionen daños a elementos no estructurales.
- Las fisuras desarrolladas bajo este estado no deben ensancharse exponiendo las armaduras a agentes ambientales o siendo visibles a simple vista.
- Se debe disminuir las vibraciones producto de acciones dinámicas, para que estas no afecten al confort o a elementos no estructurales.
- Se debe verificar la fatiga del material por las cargas de servicio oscilantes.

Las combinaciones de cargas que se analizan son las siguientes:

- **1,4 (D + F)**
- **1,2 (D + F + T) + 1,6 (L + H) + 0,5 (Lr ó S ó R)**
- **1,2 D + 1,6 (Lr ó S ó R) + (f₁ L ó 0,8 W)**
- **1,2 D + 1,6 W + f₁ L + 0,5(Lr ó S ó R)**
- **1,2 D + 1,0 E + f₁ (L + Lr) + f₂ S**
- **0,9 D + 1,6 W + 1,6 H**
- **0,9 D + 1,0 E + 1,6 H**

Siendo:

- **D:** acciones permanentes
- **F:** acciones de líquidos en general (en caso de presencia continuada y con presiones y máxima altura bien definidas)
- **T:** acciones térmicas climáticas, acciones térmicas funcionales del tipo normativo, deformaciones impuestas por el proceso constructivo o fuerzas resultantes del proceso de soldado.

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- **L:** acción debida a la ocupación y equipamiento.
- **H:** peso y empuje lateral del suelo y del agua en el suelo.
- **Lr:** cargas útiles en cubierta y mantenimiento de cubiertas. **S:** acción de la nieve.
- **R:** acción debida a la lluvia inicial, o hielo, sin considerar los efectos de acumulación de agua.
- **W:** acción del viento.
- **E:** acción sísmica.
- **f₁:** 1,0 para áreas con concentración de público, áreas donde la sobrecarga sea mayor que 5,0 kN/m², garajes o playas de estacionamiento, cargas de puentes grúas y monorrieles y otras cargas concentradas mayores que 50 kN.
- **f₁:** 0,5 para otras sobrecargas.
- **f₂:** 0,7 para configuraciones particulares de techos (tales como las de diente de sierra) que no permiten evacuar la nieve acumulada
- **f₂:** 0,2 para otras configuraciones de techo.

Estas combinaciones de cargas representan los diferentes escenarios a los que una estructura podrá estar sometida durante su vida útil. La estructura, y cada elemento de ella, debe soportar la combinación de carga que genere los mayores esfuerzos, dado que un elemento puede estar sometido a los máximos esfuerzos normales (tracción o compresión), esfuerzos de corte o cizalla, y momentos flectores y torsores en combinaciones diferentes.

Para encontrar dichos esfuerzos máximos se determinan primero las cargas actuantes. La carga permanente o muerta **D**, compuesta principalmente por el peso propio de la estructura, se obtiene mediante el software de una vez modelada la estructura. Dicho programa calcula el peso de cada elemento de la misma a partir de la sección y material elegido, brindando un valor preciso. La sobrecarga de uso, carga viva o carga de ocupación **L**, se determina en función del destino del edificio. El reglamento CIRSOC 101 (CARGAS PERMANENTES Y SOBRECARGAS DE USO) fija valores mínimos de sobrecargas de uso a respetar siempre que no se prevean cargas de uso mayores. Los valores fueron extraídos de la tabla 4.1 *Sobrecargas mínimas uniformemente distribuidas y sobrecargas mínimas concentradas del mismo*. Consideramos importantes las siguientes:

- Oficinas: 5 [kN/m²].
- Baños: 3 [kN/m²].
- Comedores/cocinas: 5 [kN/m²].
- Balcones: 5 [kN/m²].

Por otro lado, debido a que en la cubierta de techo se encontrarán emplazados paneles solares para la producción de energía eléctrica, se tuvo en cuenta dicha carga a la hora de calcular la estructura.

III. 5. 2. b.- ENTRADA DE DATOS SISMO

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El cálculo de resistencia a sismo hace uso del reglamento CIRSOC 103 – 1991, el cual utiliza el método estático equivalente.

El mismo consta de determinar los esfuerzos sísmicos considerando que *“un sistema al que se le aplica un movimiento en la base es equivalente a un sistema de base fija al cual se le aplica una fuerza igual a la masa del sistema por la aceleración en la base”*.

Si bien este reglamento fue actualizado en el año 2018, en las asignaturas de Cálculo Estructural II e Dinámica Estructural, nos basamos en los conceptos y formas de cálculo que se presentan en el elegido para modelar el edificio.

El método requiere que el calculista defina la zona sísmica, la cual depende del emplazamiento del edificio y se divide en 5 zonas: desde la zona 0 con peligrosidad muy reducida hasta zona 4 con peligrosidad muy elevada. A su vez se ingresan los valores de Tipo de suelo (existen 3 tipos, compactos, intermedios y blandos), las ductilidades por eje (las cuales depende del sistema estructural, pórticos o tabiques), el factor de riesgo de edificio (el cual depende del destino de la estructura) y la porción de carga viva a considerar (para la situación de sismo que nivel de carga viva consideramos presente en ese momento).

En este caso particular se optaron por los valores de:

- Suelo Tipo III.
- Ductilidad en ambos ejes de 3,5.
- Factor de riesgo 1.0.
- Porción de carga viva 0.25.
- Zona sísmica 1 de peligrosidad reducida.

Con esta información el programa utiliza el espectro de respuesta correspondiente a la situación presentada, define el periodo fundamental, la pseudo-aceleración, los coeficientes de reducción y sísmicos y finalmente las fuerzas horizontales que afectan a la estructura para considerarla en el cálculo.

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☐ USA ☐ Colombia ☒ CIRSOC 103-1991 ☐ CIRSOC 103-2008 (Proyecto de Reglamento) ☐ CIRSOC 103-2013

☐ India ☐ Costa Rica
☐ South Africa ☐ Cuba
☐ General method ☐ Dominican Republic
☐ EU ☐ Ecuador
☐ Belgium ☐ El Salvador
☐ Bulgaria ☐ Guatemala
☐ France ☐ Honduras
☐ Germany ☐ Mexico
☐ Italy ☐ Nicaragua
☐ Portugal ☐ Panama
☐ Romania ☐ Peru
☐ Russia ☐ Puerto Rico
☐ Spain ☐ Venezuela
☐ Algeria
☐ Morocco
☒ Argentina
☐ Bolivia
☐ Brazil
☐ Chile

Reglamento INPRES - CIRSOC 103 - Tomo I - 1991
Normas Argentinas para Construcción Sismorresistente

La normativa de homigón seleccionada es el Reglamento CIRSOC 201 - 2005. En el caso de aplicar criterios de amado por ductilidad, el diseño de las estructuras sismorresistentes de homigón se debe realizar con el Reglamento Argentino para Construcciones Sismorresistentes INPRES - CIRSOC 103 - Parte II: Construcciones de homigón Amado - 2005, tal y como se especifica en el capítulo 21 del Reglamento de homigón CIRSOC 201 - 2005.

☒ Seismic action in direction X ☒ Seismic action in direction Y

☐ Construcción asimétrica

Portion of snow load to consider

Global ductility (X)

Global ductility (Y)

Damping %

Agrupamiento de la construcción según su destino

Tipo de terreno

Portion of live load to consider

Capital (PROVINCIA DE CORDOBA)

Zona Peligrosidad sísmica reducida.

Fraction of 'g'

Período

Number of vibration modes considered in the analysis

☒ Based on the Code

☐ Automatic, until a required percentage of displaced mass is reached

☐ Specified by the user

Degrees of freedom which intervene in the analysis

☐ Consider the floors below ground level in the dynamic model

If the current job has integrated 3D structures and you wish for one of these to be excluded from the dynamic analysis, you can do so with the option 'Integrated 3D structures - List of integrated 3D structures'.

Ilustración 33 – Parámetros de diseño sísmico.

Una vez realizado el análisis y cálculo estructural el programa permite visualizar las deformadas debido al sismo en las direcciones de análisis. En este caso en particular se optó por tabicar con mayor intensidad el núcleo de baños oeste, ya que en el lado este tenemos no sólo los tabiques del núcleo de baño, sino también los de los núcleos de ascensores y escaleras, así como el muro que protege la cocina. A continuación, se muestran los resultados del primer módulo de vibración.

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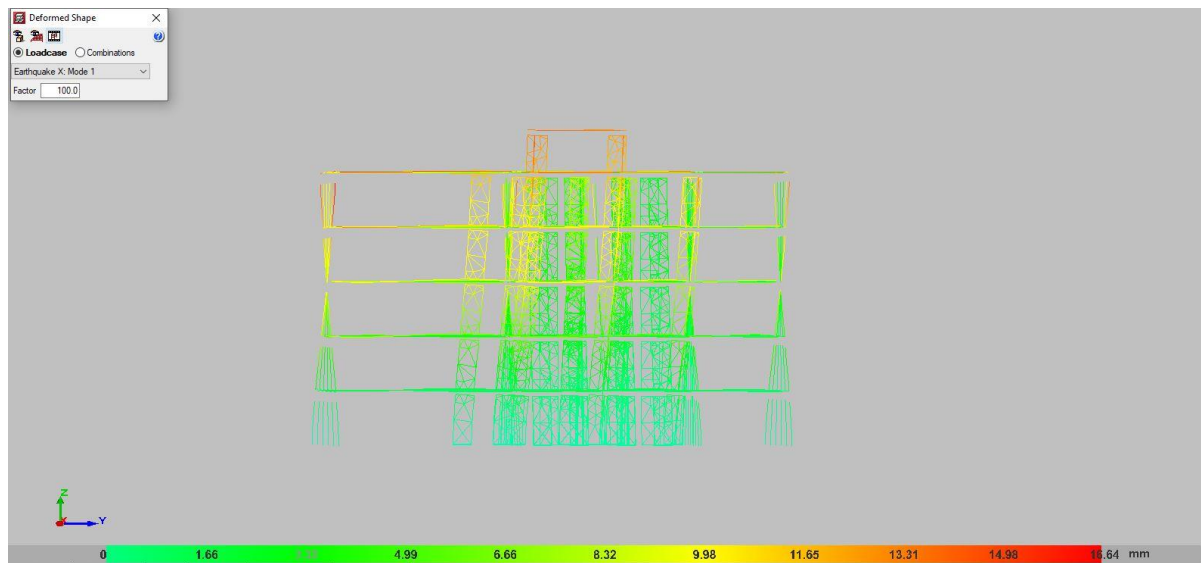


Ilustración 34 – Deformada debido al Sismo en dirección "x".

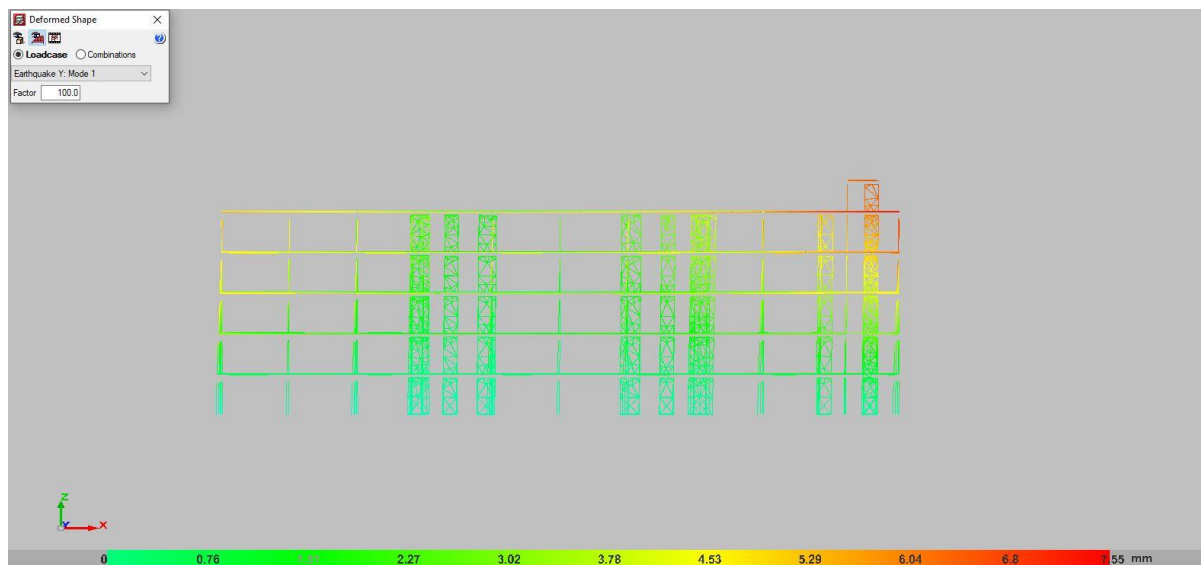


Ilustración 35 – Deformada debido al sismo en dirección "y".

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III. 5. 2. c.- ENTRADA DATOS DE VIENTO

En el caso del viento, el programa utiliza el reglamento CIRSOC 102 – 2005 el cual busca estimar los esfuerzos horizontales que el viento genera sobre la estructura. Para esto son importantes los factores siguientes:

- Ubicación geográfica.
- Categoría de uso.
- Tipo de estructura
- Protección por parte del entorno (rugosidad).

La ubicación geográfica nos permite definir la velocidad del viento. La misma no considera los vientos cotidianos sino los vientos sumamente intensos que pueden ocurrir en la zona. En el caso de Córdoba la velocidad es de 45 m/s. Se puede ver en la Ilustración 37 y Tabla 11.

Se continúa definiendo la categoría de uso, que define el riesgo que corre la vida humana. Esto se debe a que edificios como hospitales no pueden fallar en ninguna situación, son de primera necesidad. Este no es el caso de un edificio de oficinas que tiene menos de 300 personas por área. Por lo tanto, una corresponde categoría II. A su vez se debe determinar el tipo de estructura resistente en ambas direcciones para las acciones de viento. En este caso debido a la baja presencia de tabiques se considera que mayormente es un sistema de pórticos.

Finalmente se define las variables que depende del terreno. Esto es la categoría y orografía del terreno. La categoría hace referencia a las estructuras que rodean el edificio; uno que se encuentra rodeado por edificios tiene menor efecto de viento que uno en un descampado. En este caso se considera que se encuentra en un área urbana tipo II, ya que la Universidad se emplaza en una zona de transición, después de la misma existen descampados, pero previo a ella zonas de área urbana. La orografía es la superficie natural del terreno que permite definir el impacto de los vientos sobre la estructura. Como ya fue mencionado, el terreno de la Universidad Católica de Córdoba cuenta con una orografía llana.

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☐ South Africa ☐ Mexico
☐ General method ☐ Nicaragua
☐ EU ☐ Panama
☐ Belgium ☐ Paraguay
☐ Bulgaria ☐ Peru
☐ France ☐ Uruguay
☐ Germany ☐ Venezuela
☐ Italy
☐ Portugal
☐ Romania
☐ Russia
☐ Spain
☐ Algeria
☐ Morocco
☒ Argentina
☐ Brazil
☐ Chile
☐ Colombia
☐ Costa Rica

☐ CIRSOC 102-1984 ☒ CIRSOC 102-2005

Reglamento Argentino de Acción del Viento sobre las Construcciones

☒ Wind action in X + X 1.00 - X 1.00
☒ Wind action in Y + Y 1.00 - Y 1.00

Tributary widths: Y: 2.30-25.00 X: 5.50-50.00 By floor

Categoría de uso
☐ I ☒ II ☐ III ☐ IV
Todos los edificios y otras estructuras excepto aquellos listados en Categorías I, III y IV.

Datos del emplazamiento
Velocidad básica del viento (m/s) 45.0

Tipo de estructura
Dirección X ☐ A ☐ B ☒ C ☐ D
Dirección Y ☐ A ☐ B ☒ C ☐ D
Tipo 'A': Estructura de contraviento constituida por muros de mampostería o de hormigón simple.
Tipo 'B': Estructura de contraviento constituida por tabiques de hormigón armado.
Tipo 'C': Estructura de contraviento constituida por pórticos de hormigón armado.
Tipo 'D': Estructura de contraviento constituida por pórticos metálicos.

Categoría del terreno
☒ Única ☐ Según dirección
☐ A ☒ B ☐ C ☐ D
Áreas urbanas y suburbanas, áreas boscosas, o terrenos con numerosas obstrucciones próximas entre sí, del tamaño de viviendas unifamiliares o mayores. El uso de esta categoría de exposición está limitado a aquellas áreas para las cuales el terreno representativo de la Exposición B prevalece en la dirección de barlovento en una distancia de al menos 500 m ó 10 veces la altura del edificio u otra estructura, la que sea mayor.

Orografía del terreno
☒ Llano
☐ Escarpaduras
☐ Colina 2D (alineación)
☐ Colina 3D (aislada)

Ilustración 36 – Parámetros de diseño de viento.

Elaboró:	Castagnola, Daniela Noya Parera, Benjamín Roggio, María Alejandra	Código:	TF CNR – 2020
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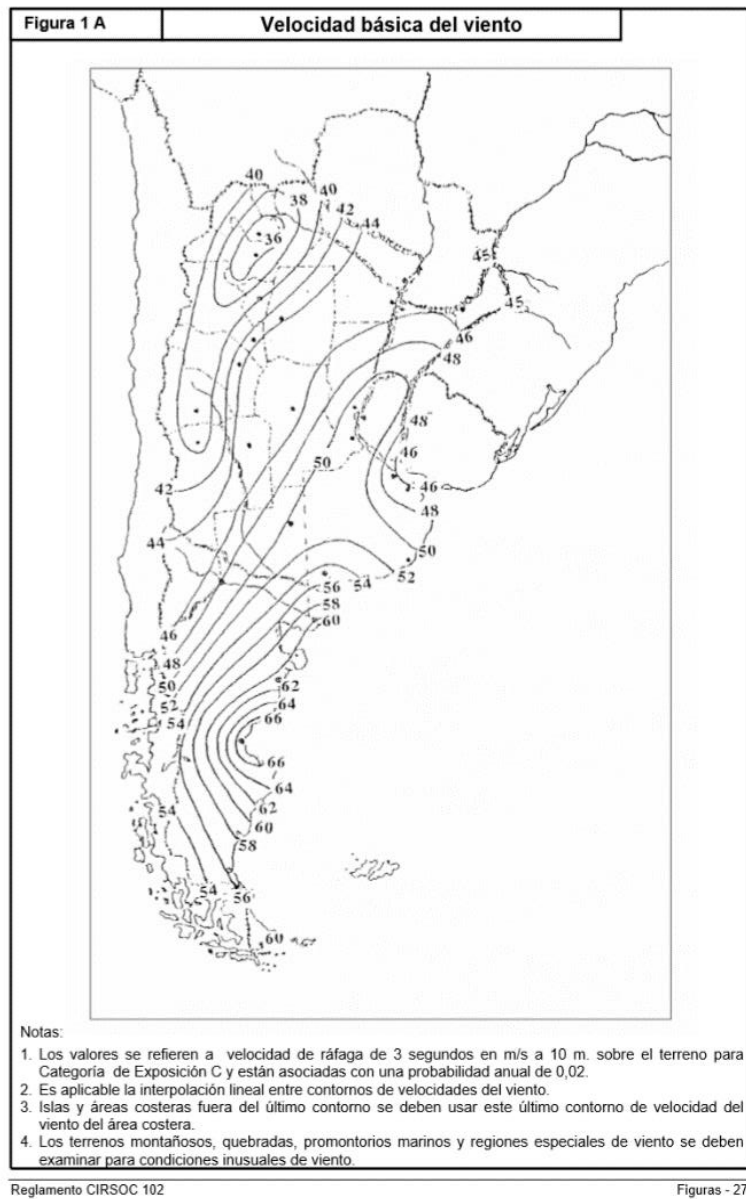


Ilustración 37 – Mapa de Velocidades de Vientos en Argentina.

Elaboró:	Castagnola, Daniela Noya Parera, Benjamín Roggio, María Alejandra	Código:	TF CNR – 2020
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Tabla 11 – Tabla de Velocidades de Vientos por ciudades.

Figura 1 B	Velocidades básicas del viento en ciudades																																																												
<table><tr><th>CIUDAD</th><th>V (m/s)</th></tr><tr><td>BAHIA BLANCA</td><td>55,0</td></tr><tr><td>BARIOLOCHE</td><td>46,0</td></tr><tr><td>BUENOS AIRES</td><td>45,0</td></tr><tr><td>CATAMARCA</td><td>43,0</td></tr><tr><td>COMODORO RIVADAVIA</td><td>67,5</td></tr><tr><td>CORDOBA</td><td>45,0</td></tr><tr><td>CORRIENTES</td><td>46,0</td></tr><tr><td>FORMOSA</td><td>45,0</td></tr><tr><td>LA PLATA</td><td>46,0</td></tr><tr><td>LA RIOJA</td><td>44,0</td></tr><tr><td>MAR DEL PLATA</td><td>51,0</td></tr><tr><td>MENDOZA</td><td>39,0</td></tr><tr><td>NEUQUEN</td><td>48,0</td></tr><tr><td>PARANA</td><td>52,0</td></tr><tr><td>POSADAS</td><td>45,0</td></tr><tr><td>RAWSON</td><td>60,0</td></tr><tr><td>RESISTENCIA</td><td>45,0</td></tr><tr><td>RIO GALLEGOS</td><td>60,0</td></tr><tr><td>ROSARIO</td><td>50,0</td></tr><tr><td>SALTA</td><td>35,0</td></tr><tr><td>SANTA FE</td><td>51,0</td></tr><tr><td>SAN JUAN</td><td>40,0</td></tr><tr><td>SAN LUIS</td><td>45,0</td></tr><tr><td>SAN MIGUEL DE TUCUMAN</td><td>40,0</td></tr><tr><td>SAN SALVADOR DE JUJUY</td><td>34,0</td></tr><tr><td>SANTA ROSA</td><td>50,0</td></tr><tr><td>SANTIAGO DEL ESTERO</td><td>43,0</td></tr><tr><td>USHUAIA</td><td>60,0</td></tr><tr><td>VIEDMA</td><td>60,0</td></tr></table>		CIUDAD	V (m/s)	BAHIA BLANCA	55,0	BARIOLOCHE	46,0	BUENOS AIRES	45,0	CATAMARCA	43,0	COMODORO RIVADAVIA	67,5	CORDOBA	45,0	CORRIENTES	46,0	FORMOSA	45,0	LA PLATA	46,0	LA RIOJA	44,0	MAR DEL PLATA	51,0	MENDOZA	39,0	NEUQUEN	48,0	PARANA	52,0	POSADAS	45,0	RAWSON	60,0	RESISTENCIA	45,0	RIO GALLEGOS	60,0	ROSARIO	50,0	SALTA	35,0	SANTA FE	51,0	SAN JUAN	40,0	SAN LUIS	45,0	SAN MIGUEL DE TUCUMAN	40,0	SAN SALVADOR DE JUJUY	34,0	SANTA ROSA	50,0	SANTIAGO DEL ESTERO	43,0	USHUAIA	60,0	VIEDMA	60,0
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<p>Nota: Los valores se refieren a velocidad de ráfaga de 3 segundos en m/s a 10 m. sobre el terreno para Categoría de Exposición C y están asociadas con una probabilidad anual de 0,02.</p>																																																													

Elaboró:	Castagnola, Daniela Noya Parera, Benjamín Roggio, María Alejandra	Código:	TF CNR – 2020
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III. 5. 2. d.- MODELADO DE LA ESTRUCTURA

El modelado de la estructura se realiza mediante 2 grandes ventanas: columnas y vigas (Columns y Beams), donde la ventana columnas permite definir los elementos verticales, como columnas, niveles y tabiques (pisos se refiere a cuanto se eleva el edificio para la definición de columnas y no a losas), mientras que la ventana vigas permite definir los elementos horizontales, tales como vigas y losas ya sean de fundación o no. Para una mayor facilidad de operación se incorporó un archivo .DWG con el diseño de planta del edificio realizado en Revit que permite posicionar las piezas en su correspondiente lugar de acuerdo al plano.

Para el diseño se agruparon las plantas PB, 1, 2 y 3 con la misma estructura y diseño (losas y vigas) ya que soportan cargas estáticas similares, mientras que la cubierta de techo debe soportar las cargas de paneles solares dispuesta sobre ella. Es en este punto donde se asignan las cargas vivas y muertas que corresponden con las cargas de elementos fijos (cielo rasos y piso de alfombra o porcelanatos en baños) y elementos móviles (escritorios, sillas, mesas, los propios trabajadores, etc.) estos valores son obtenidos, como se dijo anteriormente, del reglamento CIRSOC 101.

Luego de plantear la estructura resistente, se plantean las cargas que representan las piezas no estructurales. Y se procede con el cálculo de la misma.

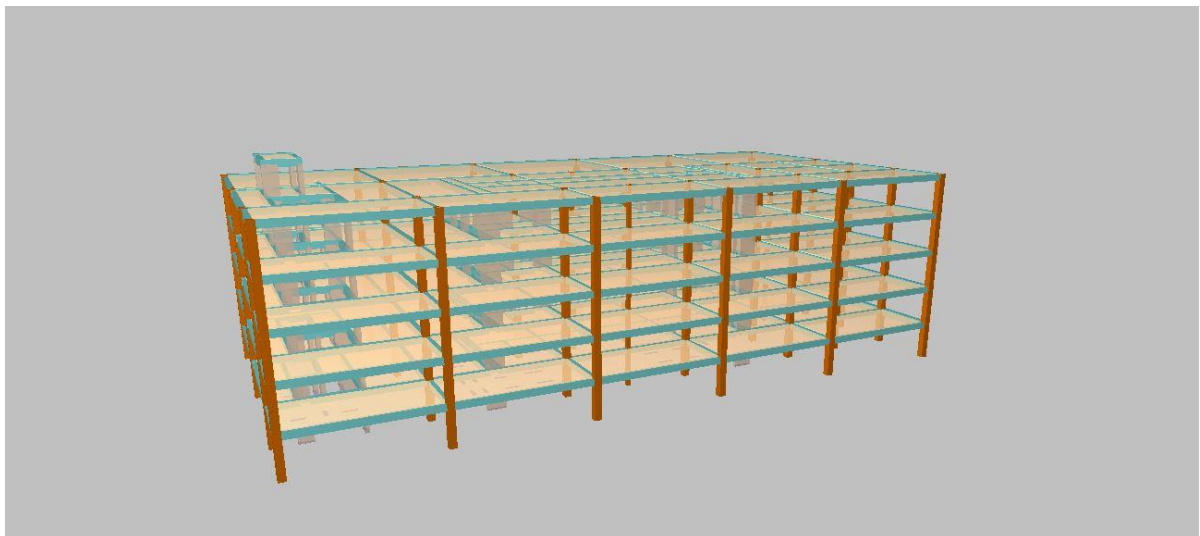


Ilustración 38 – Estructura resistente.

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III. 5. 2. e.- ANÁLISIS Y CÁLCULO DE LA ESTRUCTURA

Si bien el análisis y cálculo estructural de la superestructura lo ejecuta el programa basándose en los reglamentos, el software utiliza la metodología del CIRSOC 201/2005 para estructuras de H°A°.

III. 5. 2. e. i.- VIGAS DE H°A°

Para el cálculo de estas vigas, se verifican los estados límites de servicio y estado límite último, considerando los esfuerzos determinantes de corte, momento flector y momento torsor. Los coeficientes de minoración de resistencia de los elementos estructurales son establecidos por la norma. Obtenidas las solicitaciones, tratándose de vigas de sección rectangular, se realizan los siguientes cálculos para cada elemento:

▪ Cálculo por Flexión

El mecanismo de resistencia a flexión se logra con un bloque de hormigón en compresión, y tracción en la armadura de acero. La compresión que resiste el bloque de hormigón será, según la ecuación siguiente:

$$f_c^* = 0,85 \times f_c' = 0,85 \times 20 \text{ MPa} = 17 \text{ MPa}$$

Se calculan entonces las cuantías mecánicas mínima y máxima de acero con las ecuaciones:

$$k a_{min} = 1,4 f_c^* = 1,4 \times 17 \text{ MPa} = 0,08235$$

$$k a_{max} = k c \times \beta_1 = 0,375 \times 0,85 = 0,31875$$

Se calcula el momento nominal en función del momento último solicitante. Para esto se utiliza un coeficiente “Ø” de 0,9 debido a que la falla por flexión se considera dúctil.

$$M_N[kNm] = \frac{Mu[kNm]}{\phi} = \frac{Mu[kNm]}{0,9}$$

El momento nominal adimensional resulta:

$$m_N[kNm] = \frac{Mu[kNm]}{f_c^*[kPa] \times b[m] \times d^2[m^2]}$$

Una vez obtenido este valor, se calcula la cuantía mecánica necesaria para el elemento solicitado a flexión.

$$k a = 1 - \sqrt{1 - 2 \times n_M}$$

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Si la cuantía necesaria es menor que la $k_{a_{max}}$, no se necesita armadura en compresión, y para el cálculo de la armadura se utiliza el mayor valor entre k_a y $k_{a_{min}}$.

$$A_s [cm^2] = \frac{k_a \times f_c^* [MPa] \times b[cm] \times d[cm]}{f_y [MPa]}$$

Si la cuantía necesaria supera la cuantía máxima, el mecanismo resistente anteriormente mencionado, aportará un momento flector resistente M_C menor al momento flector solicitante, y se proveerá de armadura en la zona comprimida, la cual aporte otro par resistente " ΔM_N " para garantizar la seguridad estructural. La armadura a disponer en la cara traccionada será la suma de la A_s calculada con la cuantía máxima, más la sección dispuesta en compresión (para lograr el par " ΔM_N ").

$$M_C [kN] = k_{a_{max}} \times f_c^* [kPa] \times b[m] \times d[m]$$

$$\Delta M_N = M_N - M_C$$

Definiendo el recubrimiento de la armadura en la zona comprimida como " r' ", suponiendo una deformación límite en la fibra más comprimida de hormigón como el 3 por mil, planteando semejanza de triángulos en el estado de deformación de la sección transversal, se obtiene la tensión de trabajo de la armadura en compresión.

$$\epsilon' = 0,003 \times (k_c \times (d - r') / k_c \times d)$$

$$f_s' [MPa] = \epsilon' \epsilon_y \times f_y [MPa]$$

En este caso, la armadura en la cara comprimida se obtiene:

$$A_s' [cm^2] = \frac{\Delta M_N [kNm]}{f_s' [kPa] \times (d - r') [m]} \times 10000 [cm^2/m^2]$$

▪ Cálculo por Corte y Torsión

Para los cálculos de elementos de hormigón armado sometidos a corte y torsión se utiliza un coeficiente ϕ de 0,75 por tratarse de esfuerzos que producen fallas frágiles. Para el procedimiento de cálculo, primero deben obtenerse las características correspondientes a los estados tensionales del elemento a calcular, como así también sus características geométricas. El esfuerzo de torsión podrá despreciarse para el cálculo cuando éste sea relativamente pequeño.

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$$T_u < \frac{1}{12} \times \phi \times \sqrt{f_c'} \times \frac{Acp^2}{Pcp}$$

Cuando no sea posible despreciar los efectos de la torsión, debe primeramente verificarse la fisuración en el alma y las bielas comprimidas, por tratarse de vigas de sección maciza.

$$\sqrt{\left(\frac{V_u}{bw \times d}\right)^2 + \left(\frac{T_{uxph}}{1,7 \times Aoh^2}\right)^2} \leq \phi \times \left(\frac{Vc}{bwd} + \frac{2}{3} \times \sqrt{f_c'}\right)$$

Se calcula la resistencia al corte del hormigón:

$$Vc [kN] = \frac{1}{6} \times \sqrt{f_c'} [kPa] \times bw[m] \times d[m]$$

Se procede entonces a calcular la armadura transversal requerida por corte, ejecutada con estribos cerrados de dos ramas. Para este cálculo, siendo la condición de apoyo de todas las vigas un nudo macizo de hormigón, la sección crítica para el cálculo del corte último se ubica a una distancia “d” del borde de columna. El corte nominal, según el diseño por factores de resistencia:

$$V_N = \frac{V_u}{\phi} = \frac{V_u}{0,75}$$

La diferencia entre el corte nominal y la resistencia al corte del hormigón, debe ser tomada con la armadura Vs. Esta resistencia al corte proporcionada por la armadura, en todos los casos, se limita a un valor dado por:

$$Vs \leq \frac{2}{3} \times \sqrt{f_c'} \times bw \times d$$

La armadura necesaria perpendicular al eje de la viga para tomar el corte, se determina:

$$A_{sv}[cm^2] = \frac{Vs [kN] \times s[m]}{d[m] \times fy [kPa]} \times 10000 \left[\frac{cm^2}{m^2} \right]$$

Luego se procede a calcular la armadura necesaria por el esfuerzo de torsión (en caso de no haber despreciado su efecto). Para este refuerzo se debe disponer armadura longitudinal y transversal (se adopta $\theta=45^\circ$ por ser todos elementos no pretensados).

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$$A_t = \frac{T_N [kNm] \times s[m]}{2 \times A_o[m^2] \times f_y [kPa]} \times \tan \theta \times 10000 \left[\frac{cm^2}{m^2} \right]$$

En este punto, se determinaron las armaduras transversales (estribos) necesarias, debe verificarse que la misma sea superior a la armadura mínima por corte.

$$A_{v_{min}} = \frac{1}{16} \times \sqrt{f'c} \times \frac{bw \times s}{f_y} \geq 0,33 \times \frac{bw \times s}{f_y}$$

Para definir qué diámetro tendrán los estribos y la separación de éstos, deberá fijarse que separación “s” tendrán (medidas sobre el eje longitudinal de la viga), respetando las separaciones máximas dispuestas por el apartado 11.5.5.1 del CIRSOC 201-2005.

Una vez determinada la armadura transversal (por corte y torsión), se procede a calcular la armadura longitudinal necesaria por torsión, la misma se ubicará de forma homogénea en las caras de la viga rectangular, y se sumará, en las caras correspondientes, con la armadura longitudinal por flexión (utilizando nuevamente $\theta=45^\circ$).

$$A_t = \frac{At}{s} \times Ph \times \cot(\theta)^2$$

En algunos casos se disminuye la separación entre estribos, para lograr un mayor confinamiento del hormigón y aumentar la ductilidad local del elemento viga, en las proximidades de la unión con la columna, logrando una zona que permita disipar energía en deformación mediante un comportamiento histerético congruente con una rótula inelástica. En estas zonas donde potencialmente pueda formarse la rótula, la separación de estribos queda limitada al menor valor entre:

- 6 veces el diámetro de la barra longitudinal de menor diámetro a ser restringida en las capas exteriores.
- Un cuarto de la altura útil de la viga.

▪ Otras verificaciones

Todo lo mencionado anteriormente es ejecutado por el programa para calcular las armaduras necesarias de nuestras vigas y coincide con lo visto en las asignaturas de la carrera de Cálculo de H°A°. Sin embargo, al calcular los elementos como conjunto y no de forma aislada, el software realiza otras verificaciones tanto de resistencia como de fisuración y deflexión. Mencionamos algunas:

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- Separaciones de armaduras longitudinales a tracción.
- Mínimos y máximos refuerzos.
- Estado límite de corte (con y sin sismos actuando).
- Estados límites últimos en distintas condiciones.
- Estado límite de torsión (en todas sus direcciones).
- Separaciones mínimas y máximas de armaduras para evitar fisuración en cada cara.
- Deflexión instantánea y a 3 meses.

Toda esta información se puede ver detallada en el Anexo 200, específicamente en los planos A-201 a A-213 y en el reporte de vigas o “Beam reinforcement Report”.

III. 5. 2. e. ii.- COLUMNAS DE H°A°

Las columnas de hormigón armado se calculan para resistir solicitaciones de compresión y flexión en dos direcciones de forma simultánea (flexión disimétrica).

Para ello se utiliza la metodología del contorno de cargas, la cual considera una superficie de agotamiento de los materiales basándose en el ábaco de Roseta y la Superficie de agotamiento del material. Este método es análogo a los diagramas de interacción para flexión uniaxial, el cual se utilizó en el transcurso de la carrera para calcular la sollicitación flexo compresión de los elementos.

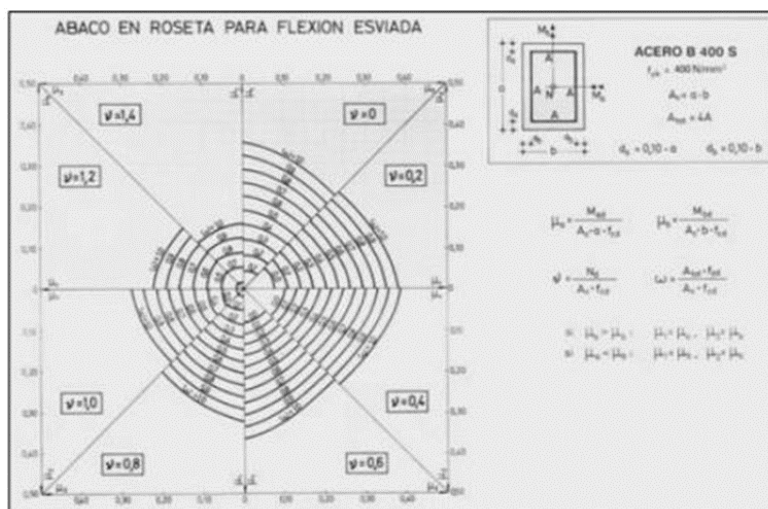


Ilustración 39 – Ábaco de Roseta

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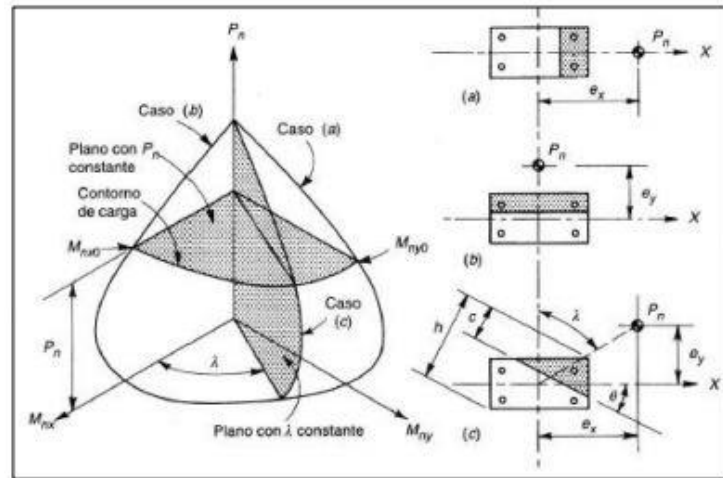


Ilustración 40 – Superficie de agotamiento del material.

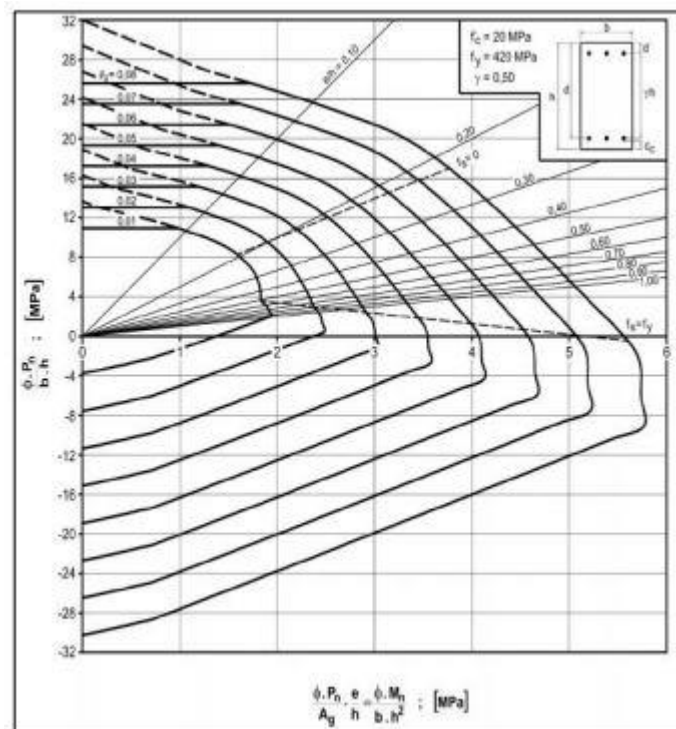


Ilustración 41 – Diagrama de Interacción para Flexo compresión.

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Se puede ver estas mismas ilustraciones aplicadas a una columna del proyecto desarrollado, de la forma en la que el software la realiza:

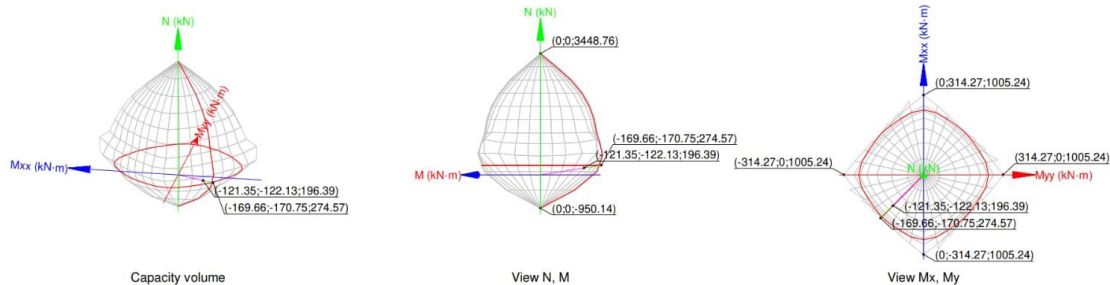


Ilustración 42 – Diagramas de Columna del proyecto en Software CYPE.

Para aproximar la expresión de estas curvas, se utiliza la siguiente ecuación:

$$1 = \frac{M_{ux}}{M_{u0x}} + \frac{M_{uy}}{M_{u0y}}$$

Donde:

- M_{ux} : Resistencia ultima a flexión alrededor del eje “y” de la sección transversal de la columna.
- M_{uy} : Resistencia ultima a flexión alrededor del eje “x” de la sección transversal de la columna.
- M_{u0x} : Resistencia ultima a flexión alrededor del eje “y” de la sección transversal de la columna, cuando $M_{uy}=0$.
- M_{u0y} : Resistencia ultima a flexión alrededor del eje “x” de la sección transversal de la columna, cuando $M_{ux}=0$.

Mediante un proceso iterativo, se propone una cuantía geométrica, se calculan los M_{u0x} y M_{u0y} utilizando los nomogramas para flexo compresión uniaxial y se verifica.

Toda esta información se puede ver detallada en el Anexo 200, específicamente en los planos A-214 a A-227 y del A-239 al A-249 y en el reporte de columnas o “Column, shear wall and wall forces and reinforcement Report”.

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III. 5. 2. e. iii.- LOSAS DE H°A°

Para el cálculo de las losas, se las trató como vigas de ancho unitario, capaces de resistir un momento por unidad de longitud. Por ello, el procedimiento de las losas macizas es análogo al de las vigas anteriormente descritas, mientras que para las losas nervuradas (como las del proyecto), antes de tratarlas como una viga de sección rectangular, se debe verificar que la capa de compresión sea capaz de generar el momento resistente requerido para no considerar el aporte en compresión del nervio.

$$Mu \leq \phi \times 0,85 \times f_c' \times hf \times s \times \left(d - \frac{hf}{2}\right)$$

Donde “s” es la separación entre nervios, “d” el brazo de palanca efectivo de la armadura traccionada y “hf” la altura de la capa de compresión.

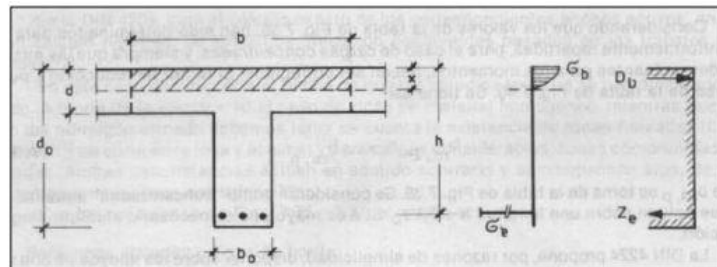


Ilustración 43 – Diagrama de sección de Viga “T” para losa nervurada.

Toda esta información se puede ver detallada en el Anexo 200, específicamente en los planos A-228 a A-238.

III. 5. 2. f.- CORRECCIÓN DE ERRORES

Una vez realizado el cálculo, el programa muestra los errores de diseño y los puntos donde la pieza no verifica. En estos casos el operador puede modificar ya sea las dimensiones estructurales o modificar la armadura para satisfacer las condiciones a las que cada estructura está dispuesta.

Se tuvo especial atención en las losas de mayor tamaño (sector sur con losas de 10m x 10m) el armado de las losas y el apoyo de las mismas de tal forma que se permita el acceso de las instalaciones por cielo raso. Es por esto que se notó que las vigas de sentido Norte - Sur tiene grandes alturas de hasta (70 cm) mientras que las de Este – Oeste no para permitir el fácil acceso desde los núcleos de instalaciones detrás de cada baño.

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III. 5. 3. - REPORTE

Toda la información recolectada del modelado y cálculo del edificio a partir del programa, se arroja en los reportes. En el Anexo 200 se adjuntan las tablas de esfuerzos, diagramas y armaduras calculadas de cada elemento y los planos obtenidos. A esto se le agrega el plano de planta general con las dimensiones disposición de todos los elementos estructurales.

IV. - SUSTENTABILIDAD DEL PROYECTO

IV. 1. - INTRODUCCIÓN

Durante el proceso de proyección de este trabajo final, al grupo le surgió la inquietud de que el mismo tuviese en cuenta en su contenido aspectos ambientales, tanto en el diseño, ahorros energéticos, producción de energías limpias, preservación de bosques y áreas verdes, etc.

En primer punto, como se menciona anteriormente en el desarrollo del Master Plan, las áreas de bosques nativos no se podrán intervenir, ya que consideramos dicha flora como esencial de preservar por los distintos beneficios que un bosque de esa índole trae. Las casi 5 hectáreas de bosque nativos ayudan a regular el drenaje natural del terreno, aportan oxígeno al ambiente, aloja a la variedad de fauna que habita en los mismos, proporcionan sombra en los días soleados, por ende, de una forma u otra, son reguladores de temperatura, entre otros puntos a favor.

La preservación de esta flora se justifica tomando como referencia y en cumplimiento de la Ley N° 9814: “Ley de Ordenamiento territorial de bosques nativos de la Provincia de Córdoba” y de la Ley N° 13.273: “Ley de defensa de la riqueza forestal”. Las mismas serán desarrolladas posteriormente.

Otro punto importante a tener en cuenta en este desarrollo es que al estar proyectando edificios donde se establecerán empresas de investigación, el gasto energético en los mismos será alto. Por ello es que se optó por la utilización de Energías Renovables para la producción de un porcentaje de este consumo. En este aspecto se responde a la Ley N° 27.191: “Ley de Régimen de Fomento Nacional para el uso de Fuentes Renovables de Energía destinada a la Producción de Energía Eléctrica”.

El último punto a tener en cuenta fue en el diseño, la aclimatación de los edificios. Se dispuso a realizar los correspondientes análisis de asoleamiento para determinar las ubicaciones óptimas de los mismos, elección correcta de materiales y buena aislación hacia el exterior.

A continuación, se desarrollarán los ítems más importantes tenidos en cuenta en este trabajo.

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IV. 2. - PRESERVACIÓN DE BOSQUES NATIVOS

Como se mencionó anteriormente, al diseñar el proyecto fue de gran significancia el resguardo de estas zonas dentro del Polo Tecnológico estudiado. Las Leyes provinciales fueron de gran ayuda para poder redondear la idea de por qué deben ser protegidos. A continuación, se citarán algunos artículos de las mismas:

“El objeto de la presente Ley es establecer el ordenamiento territorial de los bosques nativos para la Provincia de Córdoba, cuya finalidad es:

a) Promover la conservación del bosque nativo mediante el Ordenamiento Territorial de los Bosques Nativos y la regulación de la expansión de la frontera agropecuaria, minera y urbana, y de cualquier otro cambio de uso del suelo;

b) Hacer prevalecer los principios precautorios y preventivos contemplados en la Ley Nacional N° 25.675 -General del Ambiente- y en la Ley Nacional N° 26.331 -Presupuestos Mínimos de Protección Ambiental de los Bosques Nativos-;

c) Implementar las medidas necesarias para evitar la disminución de la superficie ocupada por los bosques nativos de acuerdo a lo establecido en la Ley Nacional N° 26.331;

d) Disponer los mecanismos necesarios a fin de promover el incremento de la superficie total y calidad de los bosques nativos y mantener a perpetuidad sus servicios ambientales;

e) Procurar el mantenimiento de la biodiversidad y de determinados procesos ecológicos y la mejora de los procesos sociales y culturales en los bosques nativos como fuente de arraigo e identidad para sus habitantes;

f) Garantizar la supervivencia y conservación de los bosques nativos, promoviendo su explotación racional y correcto aprovechamiento;

g) Fomentar las actividades productivas en el bosque nativo sujetas al Plan de Conservación, al Plan de Manejo Sustentable o al Plan de Aprovechamiento con Cambio de Uso del Suelo y Evaluación de Impacto Ambiental (EIA), según la categoría de conservación a la que pertenezca;

h) Establecer un régimen de fomento y criterios para la distribución de los fondos a los fines de compensar a los titulares del bosque nativo;

i) Garantizar la participación pública en el proceso y cumplimiento del ordenamiento territorial de los bosques nativos y su efectiva aplicación, según lo estipulado por la Ley Nacional N° 25.675 - General del Ambiente- y la Ley Nacional N° 25.831 -Régimen de Libre Acceso a la Información Pública Ambiental-, y

j) Fomentar las actividades de docencia e investigación para la conservación, recuperación, enriquecimiento, manejo sostenible y aprovechamiento sustentable del bosque nativo.” – ARTÍCULO 2, CAPÍTULO I - Ley N° 9814: “Ley de Ordenamiento territorial de bosques nativos de la Provincia de Córdoba”.

“En las Categorías de Conservación I (rojo) y II (amarillo) se podrá autorizar la realización de obras públicas, de interés público o de infraestructura. Para el otorgamiento de dicha autorización, la Autoridad de Aplicación deberá, en su caso, someter el pedido a un procedimiento de Evaluación de Impacto Ambiental (EIA) y su correspondiente audiencia pública. En aquellos predios en donde exista o se genere

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infraestructura para producción bajo riego, se los considerará incluidos en la Categoría de Conservación III (verde), debiendo someterse a los requisitos de la presente Ley para el cambio de uso de suelo. Las zonas estratégicas se las considerará Categoría de Conservación III (verde) debiéndose informar fehacientemente a la Autoridad de Aplicación su utilización.” - ARTÍCULO 14, CAPÍTULO II - Ley N° 9.814: “Ley de Ordenamiento territorial de bosques nativos de la Provincia de Córdoba”.

“Declárense bosques protectores aquellos que por su ubicación sirvieran, conjunta o separadamente, para:

a) proteger el suelo, caminos, las costas marítimas, riberas fluviales y orillas de lagos, lagunas, islas, canales, acequias y embalses y prevenir la erosión de las planicies y terrenos en declive;

b) proteger y regularizar el régimen de las aguas;

c) fijar médanos y dunas;

d) asegurar condiciones de salubridad pública;

e) defensa contra la acción de los elementos, vientos, aludes e inundaciones;

f) albergue y protección de especies de la flora y fauna cuya existencia se declare necesaria.” - ARTÍCULO 6, CAPÍTULO II - Ley N° 13.273: “Ley de defensa de la riqueza forestal”.

Atendiendo a lo presentado en los artículos, es que el Proyecto fue determinado y concebido con una perspectiva ambiental como prioridad.

IV. 3. - USO DE ENERGÍAS RENOVABLES

Es esperable que edificios de 5.000 m² construidos tengan un consumo de energía eléctrica elevado. Luminarias, puestos de trabajo, ascensores, computadoras y electrodomésticos y aires acondicionados son algunos de los artefactos que consumen energía dentro del mismo. Por eso es que en este trabajo se desarrolló la aplicación de generación energías limpias para su utilización y así reducir el consumo de la misma aportado por la red.

En la Provincia de Córdoba, se encuentra vigente una Ley que regula la producción de EE.RR. en establecimientos privados. Dicha ley es la N° 27.191: “Ley de Régimen de Fomento Nacional para el uso de Fuentes Renovables de Energía destinada a la Producción de Energía Eléctrica”.

El objetivo de esta ley, es motivar a los usuarios al uso de este tipo de energías para que en un futuro se logre una contribución de las fuentes renovables de energía hasta el veinte por ciento (20%) del consumo energético nacional. Por ello se especifican beneficios que tendrían los usuarios que acaten esta normativa, por ejemplo, reducción y amortizaciones de pagos en distintos impuestos o descuentos en distintas tarifas.

En la situación de análisis, se utilizó como referencia el CAPÍTULO IV: “Contribución de los Usuarios de Energía Eléctrica al Cumplimiento de los Objetivos del Régimen de Fomento”. EN el mismo, se exponen las pautas que deberá tener en cuenta el usuario productor de EE.RR.

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para encontrarse en cumplimiento de la ley, se estiman plazos, porcentajes mínimos, parámetros y precios.

“Establéese que todos los usuarios de energía eléctrica de la República Argentina deberán contribuir con el cumplimiento de los objetivos fijados en la ley 26.190, modificada por la presente, y en el Capítulo II de esta ley, del modo dispuesto en este Capítulo. A tales efectos, cada sujeto obligado deberá alcanzar la incorporación mínima del ocho por ciento (8%) del total del consumo propio de energía eléctrica, con energía proveniente de las fuentes renovables, al 31 de diciembre de 2017, y del veinte por ciento (20%) al 31 de diciembre de 2025. El cumplimiento de estas obligaciones deberá hacerse en forma gradual, de acuerdo con el siguiente cronograma:

Al 31 de diciembre de 2017, deberán alcanzar como mínimo el ocho por ciento (8%) del total del consumo propio de energía eléctrica.

Al 31 de diciembre de 2019, deberán alcanzar como mínimo el doce por ciento (12%) del total del consumo propio de energía eléctrica.

Al 31 de diciembre de 2021, deberán alcanzar como mínimo el dieciséis por ciento (16%) del total del consumo propio de energía eléctrica.

Al 31 de diciembre de 2023, deberán alcanzar como mínimo el dieciocho por ciento (18%) del total del consumo propio de energía eléctrica.

Al 31 de diciembre de 2025, deberán alcanzar como mínimo el veinte por ciento (20%) del total del consumo propio de energía eléctrica.

El consumo mínimo fijado para la fecha de corte de cada período no podrá ser disminuido en el período siguiente.” – ARTÍCULO IV – Ley 8, CAPÍTULO N° 27.191: “Ley de Régimen de Fomento Nacional para el uso de Fuentes Renovables de Energía destinada a la Producción de Energía Eléctrica”.

Visto esto, se entendió que, de la energía a consumir por cada edificio un veinte por ciento (20%) deberá ser producida por energías limpias. Se tomó el valor del año 2025 ya que se consideró que, por los plazos de obra correspondientes para edificios de esta envergadura, para cuando los mismos estén terminados ya se garantizaría el cumplimiento de la ley y no habría que realizar obras de ingeniería adicionales para cumplirla y garantizar ese porcentaje.

Ahora teniendo en cuenta ese número, se procedió a realizar distintos análisis cualitativos y cuantitativos para determinar el tipo de producción energética, cantidad de artefactos necesarios y otros aspectos importantes.

IV. 3. 1. - SELECCIÓN DEL TIPO DE PRODUCCIÓN ENERGÉTICA

El polo tecnológico desarrollado se ubica en la Ciudad de Córdoba, Provincia de Córdoba, Argentina. En este territorio tanto la incidencia solar como la acción de los vientos nos posibilita la instalación tanto de paneles para la producción de energía fotovoltaica como turbinas para generación de energía eólica.

Se optó por la producción de energía a partir de la radiación solar considerando distintos puntos:

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- El conocimiento sobre este tipo de energía es mayor y se contaba con mayor información y bibliografía para el desarrollo y cálculos pertinentes para casos en la Ciudad de Córdoba, siendo este tipo de producción de las que mejor funciona en la zona.
- Al contar con edificios con cubiertas libres, se consideró oportuno que en las mismas se realice la instalación de paneles solares para ahorrar en materiales, facilitar instalaciones y disminuir pérdidas.
- El rango horario de horas pico donde se genera energía solar en la Ciudad de Córdoba es compatible con el rango horario en el que las instalaciones del edificio se encuentran activas.

Teniendo en cuenta estos factores, se procede a realizar los cálculos pertinentes para continuar con este análisis.

IV. 3. 2. - CÁLCULO DE CONSUMO DEL EDIFICIO DISEÑADO

Para calcular el consumo de energía eléctrica del edificio, se tomó como guía la planta tipo (ver plano A101) del mismo y se consideraron tres grandes aspectos de consumo:

- Luminarias
- Computadoras
- Acondicionamiento.

Si bien otros artefactos consumen energía, estos son los tomados en cuenta siendo los que mayor consumo producen y se encuentran en uso constante.

Para el cálculo de consumo por luminarias se separó la planta en distintas categorías por uso:

- Lugar de Trabajo (LuT)
- Pasillos (Pas)
- Comedor (Com)
- Balcón (Bal)
- Ascensores (Asc)
- Baños Hombres (BaH)
- Baños Mujeres (BaM)
- Baños Discapacitados (BaD)
- Sala de Reuniones 1 (SR1)
- Sala de Reuniones 2 (SR2)
- Sala de Electricidad (SaE)
- Lobby Empresarial (LoE)

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- Escaleras (Esc)
- Zona de Relax (ZoR).

El propósito de esta separación fue que, según el sector, la necesidad de iluminación es distinta, por ejemplo, la “cantidad de luz” requerida en los puestos de trabajo no es la misma que en el comedor. También, según el sector se determina la cantidad de horas que las luminarias permanecen encendidas u horas efectivas de luminaria a partir de coeficientes de simultaneidad de unidades. Este análisis se puede apreciar en las siguientes tablas:

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Tabla 12 – Cálculo de horas efectivas de luminaria en sectores 01 y 02.

Lugar de Trabajo - LuT- 01				Pasillos - Pas - 02			
Pot	2	KW		Pot	1	KW	
Energía	16	KWH		Energía	3	KWH	
Horas	Uso	Simult	KWH	Horas	Uso	Simult	KWH
0	0	0	0,0000	0	0	0	0,0000
1	0	0	0,0000	1	0	0	0,0000
2	0	0	0,0000	2	0	0	0,0000
3	0	0	0,0000	3	0	0	0,0000
4	0	0	0,0000	4	0	0	0,0000
5	0	0	0,0000	5	0	0	0,0000
6	0	0	0,0000	6	0	0	0,0000
7	0	0	0,0000	7	0	0	0,0000
8	1	0,3	0,6840	8	1	0,25	0,1400
9	1	0,6	1,3680	9	1	0,5	0,2800
10	1	0,7	1,5960	10	1	0,6	0,3360
11	1	0,7	1,5960	11	1	0,6	0,3360
12	1	0,7	1,5960	12	1	0,6	0,3360
13	1	0,7	1,5960	13	1	0,6	0,3360
14	1	0,7	1,5960	14	1	0,6	0,3360
15	1	0,7	1,5960	15	1	0,6	0,3360
16	1	0,5	1,1400	16	1	0,5	0,2800
17	1	0,5	1,1400	17	1	0,5	0,2800
18	1	0,4	0,9120	18	1	0,4	0,2240
19	1	0,3	0,6840	19	1	0,25	0,1400
20	0	0	0,0000	20	0	0	0,0000
21	0	0	0,0000	21	0	0	0,0000
22	0	0	0,0000	22	0	0	0,0000
23	0	0	0,0000	23	0	0	0,0000
0	0	0	0,0000	0	0	0	0,0000
12	6,8	15,5040		12	6	3,3600	

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Tabla 13 – Cálculo de horas efectivas de luminaria en sectores 03 y 04.

Comedores - Com - 03				Balcón - Bal - 04			
Pot	0	KW		Pot	0	KW	
Energía	0	KWH		Energía	0	KWH	
Horas	Uso	Simult	KWH	Horas	Uso	Simult	KWH
0	0	0	0,0000	0	0	0	0,0000
1	0	0	0,0000	1	0	0	0,0000
2	0	0	0,0000	2	0	0	0,0000
3	0	0	0,0000	3	0	0	0,0000
4	0	0	0,0000	4	0	0	0,0000
5	0	0	0,0000	5	0	0	0,0000
6	0	0	0,0000	6	0	0	0,0000
7	0	0	0,0000	7	0	0	0,0000
8	1	0,2	0,0320	8	0	0	0,0000
9	1	0,2	0,0320	9	0	0	0,0000
10	0	0	0,0000	10	0	0	0,0000
11	0	0	0,0000	11	0	0	0,0000
12	0	0	0,0000	12	0	0	0,0000
13	1	0,5	0,0800	13	1	0,2	0,0013
14	1	0,5	0,0800	14	1	0,2	0,0013
15	1	0,5	0,0800	15	1	0,5	0,0033
16	0	0	0,0000	16	0	0	0,0000
17	0	0	0,0000	17	0	0	0,0000
18	1	0,1	0,0160	18	1	0,1	0,0007
19	0	0	0,0000	19	0	0	0,0000
20	0	0	0,0000	20	0	0	0,0000
21	0	0	0,0000	21	0	0	0,0000
22	0	0	0,0000	22	0	0	0,0000
23	0	0	0,0000	23	0	0	0,0000
0	0	0	0,0000	0	0	0	0,0000
6	2	0,3200		4	1	0,0065	

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Tabla 14 – Cálculo de horas efectivas de luminaria en sectores 05 y 06.

Ascensores - Asc - 05				Baños Hombres - BaH - 06			
Pot	0	KW		Pot	0	KW	
Energía	0	KWH		Energía	0	KWH	
Horas	Uso	Simult	KWH	Horas	Uso	Simult	KWH
0	0	0	0,0000	0	0	0	0,0000
1	0	0	0,0000	1	0	0	0,0000
2	0	0	0,0000	2	0	0	0,0000
3	0	0	0,0000	3	0	0	0,0000
4	0	0	0,0000	4	0	0	0,0000
5	0	0	0,0000	5	0	0	0,0000
6	0	0	0,0000	6	0	0	0,0000
7	0	0	0,0000	7	0	0	0,0000
8	1	0,4	0,0026	8	1	0,2	0,0080
9	1	0,4	0,0026	9	1	0,3	0,0120
10	0	0	0,0000	10	0	0	0,0000
11	0	0	0,0000	11	0	0	0,0000
12	0	0	0,0000	12	1	0,5	0,0200
13	1	0,2	0,0013	13	1	0,4	0,0160
14	1	0,2	0,0013	14	1	0,4	0,0160
15	0	0	0,0000	15	1	0,5	0,0200
16	0	0	0,0000	16	0	0	0,0000
17	0	0	0,0000	17	0	0	0,0000
18	1	0,4	0,0026	18	1	0,4	0,0160
19	1	0,4	0,0026	19	1	0,3	0,0120
20	0	0	0,0000	20	0	0	0,0000
21	0	0	0,0000	21	0	0	0,0000
22	0	0	0,0000	22	0	0	0,0000
23	0	0	0,0000	23	0	0	0,0000
0	0	0	0,0000	0	0	0	0,0000
6	2	0,0130		8	3	0,1200	

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Tabla 15 – Cálculo de horas efectivas de luminaria en sectores 07 y 08.

Baños Mujeres - BaM - 07				Baños Discapacitados - BaD - 08			
Pot	0	KW		Pot	0	KW	
Energía	0	KWH		Energía	0	KWH	
Horas	Uso	Simult	KWH	Horas	Uso	Simult	KWH
0	0	0	0,0000	0	0	0	0,0000
1	0	0	0,0000	1	0	0	0,0000
2	0	0	0,0000	2	0	0	0,0000
3	0	0	0,0000	3	0	0	0,0000
4	0	0	0,0000	4	0	0	0,0000
5	0	0	0,0000	5	0	0	0,0000
6	0	0	0,0000	6	0	0	0,0000
7	0	0	0,0000	7	0	0	0,0000
8	1	0,2	0,0080	8	1	0,2	0,0020
9	1	0,3	0,0120	9	1	0,3	0,0030
10	0	0	0,0000	10	0	0	0,0000
11	0	0	0,0000	11	0	0	0,0000
12	1	0,5	0,0200	12	1	0,2	0,0020
13	1	0,4	0,0160	13	1	0,3	0,0030
14	1	0,4	0,0160	14	1	0,2	0,0020
15	1	0,5	0,0200	15	1	0,3	0,0030
16	0	0	0,0000	16	0	0	0,0000
17	0	0	0,0000	17	0	0	0,0000
18	1	0,4	0,0160	18	1	0,3	0,0030
19	1	0,3	0,0120	19	1	0,2	0,0020
20	0	0	0,0000	20	0	0	0,0000
21	0	0	0,0000	21	0	0	0,0000
22	0	0	0,0000	22	0	0	0,0000
23	0	0	0,0000	23	0	0	0,0000
0	0	0	0,0000	0	0	0	0,0000
8	3	0,1200		8	2	0,0200	

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Tabla 16 – Cálculo de horas efectivas de luminaria en sectores 09 y 10.

Sala Reuniones 1 - SR1 - 09				Sala Reuniones 2 - SR2 - 10			
Pot	0	KW		Pot	0	KW	
Energía	1	KWH		Energía	1	KWH	
Horas	Uso	Simult	KWH	Horas	Uso	Simult	KWH
0	0	0	0,0000	0	0	0	0,0000
1	0	0	0,0000	1	0	0	0,0000
2	0	0	0,0000	2	0	0	0,0000
3	0	0	0,0000	3	0	0	0,0000
4	0	0	0,0000	4	0	0	0,0000
5	0	0	0,0000	5	0	0	0,0000
6	0	0	0,0000	6	0	0	0,0000
7	0	0	0,0000	7	0	0	0,0000
8	0	0	0,0000	8	0	0	0,0000
9	1	0,7	0,1512	9	1	0,7	0,1386
10	1	0,7	0,1512	10	1	0,7	0,1386
11	1	0,7	0,1512	11	1	0,7	0,1386
12	0	0	0,0000	12	0	0	0,0000
13	0	0	0,0000	13	0	0	0,0000
14	0	0	0,0000	14	0	0	0,0000
15	0	0	0,0000	15	0	0	0,0000
16	1	0,7	0,1512	16	1	0,7	0,1386
17	1	0,6	0,1296	17	1	0,6	0,1188
18	1	0,6	0,1296	18	1	0,6	0,1188
19	0	0	0,0000	19	0	0	0,0000
20	0	0	0,0000	20	0	0	0,0000
21	0	0	0,0000	21	0	0	0,0000
22	0	0	0,0000	22	0	0	0,0000
23	0	0	0,0000	23	0	0	0,0000
0	0	0	0,0000	0	0	0	0,0000
6	4	0,8640		6	4	0,7920	

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Tabla 17 – Cálculo de horas efectivas de luminaria en sectores 11 y 12.

Sala Electricidad - SaE - 11				Lobby Empresarial - LoE - 12			
Pot	0	KW		Pot	0	KW	
Energía	0	KWH		Energía	0	KWH	
Horas	Uso	Simult	KWH	Horas	Uso	Simult	KWH
0	0	0	0,0000	0	0	0	0,0000
1	0	0	0,0000	1	0	0	0,0000
2	0	0	0,0000	2	0	0	0,0000
3	0	0	0,0000	3	0	0	0,0000
4	0	0	0,0000	4	0	0	0,0000
5	0	0	0,0000	5	0	0	0,0000
6	0	0	0,0000	6	0	0	0,0000
7	0	0	0,0000	7	0	0	0,0000
8	1	0,3	0,0021	8	0	0	0,0000
9	0	0	0,0000	9	0	0	0,0000
10	0	0	0,0000	10	1	1	0,0540
11	0	0	0,0000	11	1	1	0,0540
12	0	0	0,0000	12	0	0	0,0000
13	1	0,3	0,0021	13	0	0	0,0000
14	0	0	0,0000	14	0	0	0,0000
15	0	0	0,0000	15	0	0	0,0000
16	0	0	0,0000	16	1	1	0,0540
17	0	0	0,0000	17	1	1	0,0540
18	0	0	0,0000	18	0	0	0,0000
19	1	0,4	0,0028	19	0	0	0,0000
20	0	0	0,0000	20	0	0	0,0000
21	0	0	0,0000	21	0	0	0,0000
22	0	0	0,0000	22	0	0	0,0000
23	0	0	0,0000	23	0	0	0,0000
0	0	0	0,0000	0	0	0	0,0000
3	1	0,0070		4	4	0,2160	

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Tabla 18 – Cálculo de horas efectivas de luminaria en sectores 13 y 14.

Escaleras - Esc-13				Zona de Relax - ZoR-14			
Pot	0	KW		Pot	0	KW	
Energía	0	KWH		Energía	0	KWH	
Horas	Uso	Simult	KWH	Horas	Uso	Simult	KWH
0	0	0	0,0000	0	0	0	0,0000
1	0	0	0,0000	1	0	0	0,0000
2	0	0	0,0000	2	0	0	0,0000
3	0	0	0,0000	3	0	0	0,0000
4	0	0	0,0000	4	0	0	0,0000
5	0	0	0,0000	5	0	0	0,0000
6	0	0	0,0000	6	0	0	0,0000
7	0	0	0,0000	7	0	0	0,0000
8	0	0	0,0000	8	0	0	0,0000
9	1	0,5	0,0220	9	0	0	0,0000
10	0	0	0,0000	10	0	0	0,0000
11	0	0	0,0000	11	0	0	0,0000
12	0	0	0,0000	12	0	0	0,0000
13	0	0	0,0000	13	1	0,75	0,0150
14	0	0	0,0000	14	1	0,75	0,0150
15	0	0	0,0000	15	1	0,75	0,0150
16	0	0	0,0000	16	1	0,75	0,0150
17	0	0	0,0000	17	0	0	0,0000
18	0	0	0,0000	18	0	0	0,0000
19	1	0,5	0,0220	19	0	0	0,0000
20	0	0	0,0000	20	0	0	0,0000
21	0	0	0,0000	21	0	0	0,0000
22	0	0	0,0000	22	0	0	0,0000
23	0	0	0,0000	23	0	0	0,0000
0	0	0	0,0000	0	0	0	0,0000
2	1	0,0440		4	3	0,0600	

El primer paso para este cálculo fue la obtención de las superficies en metros cuadrados (m^2) de cada división y que cantidad de cada sector se encuentra en dicha planta obteniendo una superficie total por sector. Luego se buscó en tablas determinadas por norma la cantidad de “Intensidad luminosa o de iluminación” (Lux) necesarios en cada sector para después convertir esta unidad en “Lúmenes”.

$$Lumen = Intensidad Luminosa [Lux] \cdot Superficie [m^2]$$

Esta conversión es necesaria ya que a partir de la cantidad de Lúmenes se puede obtener la potencia en Vatios:

$$Potencia [W] = Lumenes / 100$$

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Para facilitar el cálculo, se realizó una conversión de unidades de Vatios [W] a Kilo Vatios [KW]. Para finalizar, se ejecutó el producto entre la potencia y la cantidad de horas que se encuentra encendida la luminaria en cada sector para así obtener el consumo [KWh]. La siguiente tabla resume el cálculo mencionado en cada sector:

Tabla 19 – Consumo de Luminaria en una planta por sector.

LUMINARIAS EN UNA PLANTA											
It.	DATOS					CONSUMO					
	Descripción	Codigo	Sup. Unitarias [m²]	Cantidad	Total [m²]	[Lux]	[Lumens]	[W]	[KW]	[h]	[KWh]
1	Lugar de Trabajo	LuT	570	1	570	400	228000	2280	2,28	6,8	15,50
2	Pasillos	Pas	280	1	280	200	56000	560	0,56	6	3,36
3	Comedor	Com	80	1	80	200	16000	160	0,16	2	0,32
4	Balcón	Bal	6,5	1	6,5	100	650	6,5	0,01	1	0,01
5	Ascensores	Asc	6,5	1	6,5	100	650	6,5	0,01	2	0,01
6	Baños Hombre	BaH	20	2	40	100	4000	40	0,04	3	0,12
7	Baños Mujeres	BaM	20	2	40	100	4000	40	0,04	3	0,12
8	Baños Discapacitados	BaD	5	2	10	100	1000	10	0,01	2	0,02
9	Sala de Reuniones 1	SR1	18	4	72	300	21600	216	0,22	4	0,86
10	Sala de Reuniones 2	SR2	33	2	66	300	19800	198	0,20	4	0,79
11	Sala de Electricidad	SaE	7	1	7	100	700	7	0,01	1	0,01
12	Lobby Empresarial	LoE	18	1	18	300	5400	54	0,05	4	0,22
13	Escaleras	Esc	44	1	44	100	4400	44	0,04	1	0,04
14	Zona de Relax	ZoR	10	1	10	200	2000	20	0,02	3	0,06
TOTAL=					1250	2600	364200	3642	3,642		21,45

Para el cálculo de consumo por computadoras se realizó un proceso similar. Primero se calcularon las horas efectivas de computadoras y luego el consumo. A continuación, se muestran las tablas correspondientes:

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Tabla 20 – Cálculo de horas efectivas de computadoras.

	Computadoras		
	Pot	52	[KW]
	Energía	286	[KWh]
Horas	Uso	Simult	[KWh]
0	0	0	0,0000
1	0	0	0,0000
2	0	0	0,0000
3	0	0	0,0000
4	0	0	0,0000
5	0	0	0,0000
6	0	0	0,0000
7	0	0	0,0000
8	1	0,2	10,4000
9	1	0,6	31,2000
10	1	0,7	36,4000
11	1	0,7	36,4000
12	1	0,6	31,2000
13	1	0,4	20,8000
14	1	0,5	26,0000
15	1	0,7	36,4000
16	1	0,3	15,6000
17	1	0,3	15,6000
18	1	0,3	15,6000
19	1	0,2	10,4000
20	0	0	0,0000
21	0	0	0,0000
22	0	0	0,0000
23	0	0	0,0000
0	0	0	0,0000
	12	5,5	286,0000

Tabla 21 – Consumo de computadoras en una planta.

COMPUTADORAS										
It.	DATOS					CONSUMO				
	Descripción	Codigo	Sup. Unitarias [m²]	Cantidad	Total [m²]	[Lux]	[Lumens]	[W]	[KW]	[h]
1	Computadoras	PCs	400	130	52000			52000	52,00	5,5
			TOTAL=		52000			52000	52,00	

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Y de la misma manera para la aclimatación de la planta:

Tabla 22 – Cálculo de horas efectivas de aclimatación.

	Climatización		
	Pot	0	[KW]
	Energía	164	[KWh]
Horas	Uso	Simult	[KWh]
0	0	0	0,0000
1	0	0	0,0000
2	0	0	0,0000
3	0	0	0,0000
4	0	0	0,0000
5	0	0	0,0000
6	0	0	0,0000
7	0	0	0,0000
8	0	0	0,0000
9	1	0,2	0,0109
10	1	0,3	0,0164
11	1	0,4	0,0218
12	1	0,2	0,0109
13	1	0,4	0,0218
14	1	0,4	0,0218
15	1	0,2	0,0109
16	1	0,4	0,0218
17	1	0,3	0,0164
18	1	0,2	0,0109
19	0	0	0,0000
20	0	0	0,0000
21	0	0	0,0000
22	0	0	0,0000
23	0	0	0,0000
0	0	0	0,0000
	10	3	0,1635

Tabla 23 – Consumo por aclimatación de una planta

ACONDICIONAMIENTO											
It.	DATOS					CONSUMO					
	Descripción	Codigo	Sup. Unitarias [m²]	Cantidad	Total [m²]	[Lux]	[Lumens]	[W]	[KW]	[h]	[KWh]
1	Aires acondicionado (F/C)	AC	3125	60	187500	218,02		54,505	0,05	3	163,52
			TOTAL=		187500			54,505	0,05		163,52

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De esta forma, se obtuvo el consumo total de una planta, siendo este valor **470,96 [KWh]**. Teniendo en cuenta que el edificio planteado contaba con sus cuatro (4) plantas iguales, solo bastó con multiplicar el valor obtenido por el número de plantas para adquirir el consumo total del edificio.

$$\text{Consumo Total [KWh]} = \text{Consumo Planta [KWh]} \times \text{Nro de plantas} = 470,96 \times 4 = 1.883,84 \text{ [KWh]}$$

Tabla 24 – Consumo total del Edificio.

Consumo por piso	[KWh]	470,96
Cantidad de pisos	[Un]	4
Consumo de un edificio	[KWh]	1883,846

Este valor se utilizó para el cálculo de la cantidad de paneles solares a instalar para garantizar el cumplimiento de la ley.

Este consumo total obtenido no se produce uniformemente a lo largo del día. Como se vio al comienzo de esta sección, se aplicaron coeficientes de simultaneidad para calcular las horas efectivas de consumo y a partir de las mismas se pudo ejecutar el siguiente gráfico y la siguiente tabla a modo de resumen:

Tabla 25 – Resumen de horas de consumo efectivas.

HORA	LuT	Pas	Com	Bal	Asc	BaH	BaM	BaD	SR1	SR2	SaE	LoE	Esc	ZoR	TOTAL
0	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
1	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
2	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
3	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
4	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
5	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
6	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
7	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
8	0,6840	0,1400	0,0320	0,0000	0,0026	0,0080	0,0080	0,0020	0,0000	0,0000	0,0021	0,0000	0,0000	0,0000	0,8787
9	1,3680	0,2800	0,0320	0,0000	0,0026	0,0120	0,0120	0,0030	0,1512	0,1386	0,0000	0,0000	0,0220	0,0000	2,0214
10	1,5960	0,3360	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,1512	0,1386	0,0000	0,0540	0,0000	0,0000	2,2758
11	1,5960	0,3360	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,1512	0,1386	0,0000	0,0540	0,0000	0,0000	2,2758
12	1,5960	0,3360	0,0000	0,0000	0,0000	0,0200	0,0200	0,0020	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	1,9740
13	1,5960	0,3360	0,0800	0,0013	0,0013	0,0160	0,0160	0,0030	0,0000	0,0000	0,0021	0,0000	0,0000	0,0150	2,0667
14	1,5960	0,3360	0,0800	0,0013	0,0013	0,0160	0,0160	0,0020	0,0000	0,0000	0,0000	0,0000	0,0000	0,0150	2,0636
15	1,5960	0,3360	0,0800	0,0033	0,0000	0,0200	0,0200	0,0030	0,0000	0,0000	0,0000	0,0000	0,0000	0,0150	2,0733
16	1,1400	0,2800	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,1512	0,1386	0,0000	0,0540	0,0000	0,0150	1,7788
17	1,1400	0,2800	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,1296	0,1188	0,0000	0,0540	0,0000	0,0000	1,7224
18	0,9120	0,2240	0,0160	0,0007	0,0026	0,0160	0,0160	0,0030	0,1296	0,1188	0,0000	0,0000	0,0000	0,0000	1,4387
19	0,6840	0,1400	0,0000	0,0000	0,0026	0,0120	0,0120	0,0020	0,0000	0,0000	0,0028	0,0000	0,0220	0,0000	0,8774
20	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
21	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
22	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
23	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
24	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
	15,5040	3,3600	0,3200	0,0065	0,0130	0,1200	0,1200	0,0200	0,8640	0,7920	0,0070	0,2160	0,0440	0,0600	21,4465

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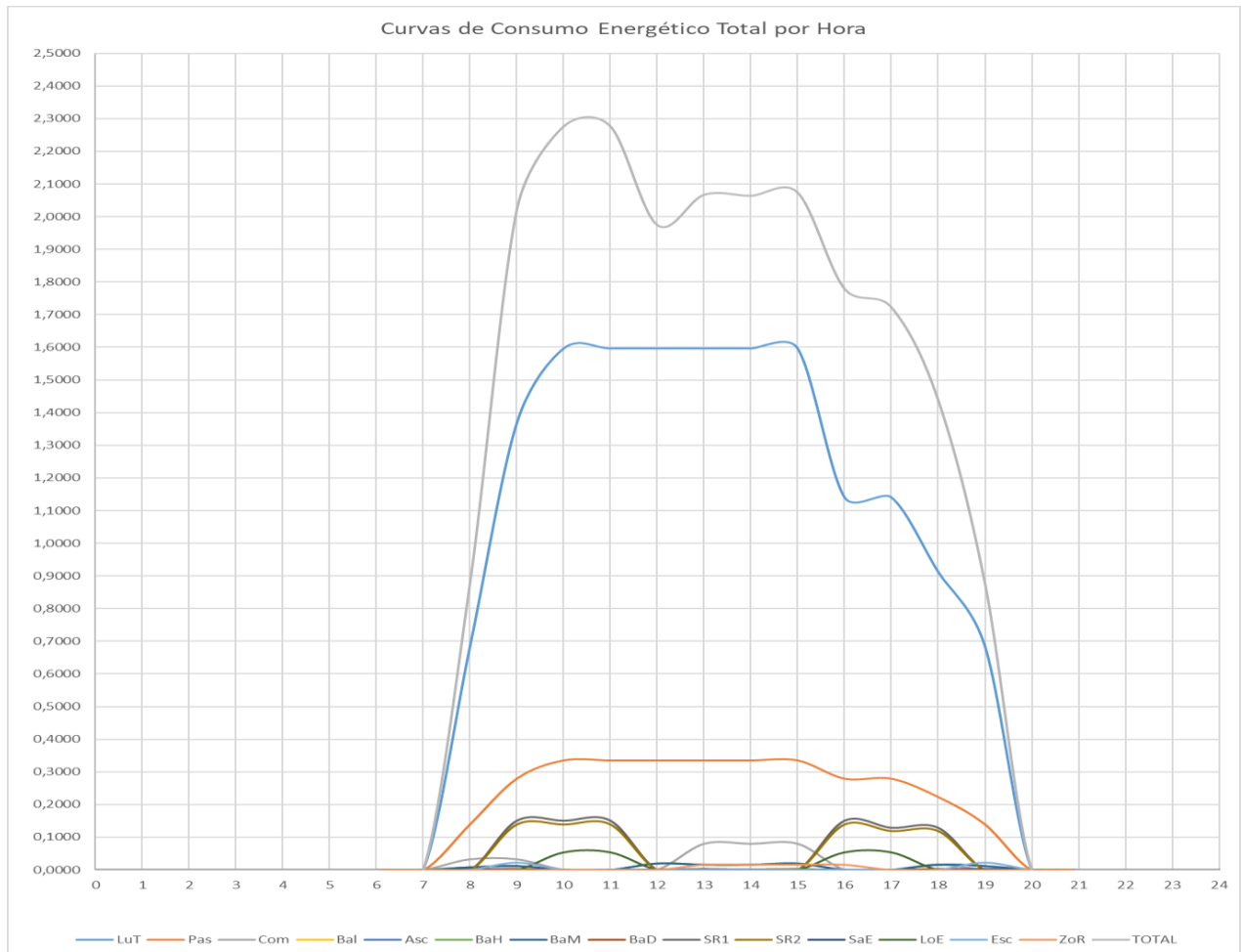


Gráfico 3 – Curvas de Consumo Energético total por hora.

IV. 3. 3. - CÁLCULO DE CANTIDAD DE PANELES

A partir del valor obtenido anteriormente del cálculo del consumo del edificio se procedió a calcular la cantidad de paneles necesarios. Para ello primero se debió tener en claro distintos datos:

- Porcentaje de consumo a cubrir: 20%.
- Horas pico promedio de generación de energía solar en Córdoba: 5,5 [h].
- Eficiencia estimada: 85%.
- Potencia de un (1) panel: 325 [W].

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- Dimensiones de panel: 1x2 [m].

Con todo esto se pudo comenzar a calcular.

Primero, se obtuvo el porcentaje del total del consumo que se debe cubrir para así saber qué valor de energía deberán producir los paneles:

$$\text{Energía a producir por Paneles [KWh]} = \text{Consumo Total [KWh]} \times 0,2$$

Luego, se realizó el cociente entre el valor obtenido anteriormente y la cantidad de horas pico para así obtener la potencia requerida por los paneles:

$$\text{Potencia Requerida [KW]} = \text{Energía a producir [KWh]} \times \text{horas pico [h]}$$

Sabiendo que se estimó una eficiencia del 85%, para obtener la potencia real a instalar, se debió afectar a la potencia requerida por este factor:

$$\text{Potencia a Instalar [KW]} = \frac{\text{Potencia Requerida [KW]}}{0,85}$$

Como la potencia de cada panel se expresa en Vatios se realizó un pasaje de unidades de la potencia a instalar a dicha unidad. Luego solo quedó dividir la Potencia a Instalar por la Potencia de cada panel y de obtuvo la cantidad de paneles necesaria:

$$\text{Cantidad de Paneles} = \frac{\text{Potencia a Instalar [W]}}{\text{Potencia de un Panel [W]}}$$

Todos estos cálculos se resumieron en la Tabla 26:

Tabla 26 – Cálculo de cantidad de Paneles.

CÁLCULO CANTIDAD DE PANELES		
Consumo por piso	[KWh]	470,96
Cantidad de pisos	[Un]	4
Consumo de un edificio	[KWh]	1883,846
Porcentaje de consumo a cubrir	[%]	20
Energía a producir por paneles	[KWh]	376,8
Horas Pico Promedio	[h]	5,5
Potencia Requerida por Paneles	[KW]	68,5
Eficiencia estimada	[%]	85
Potencia a instalar	[KW]	80,6
	[W]	80592,3
Potencia de cada panel	[W]	325
Cantidad de paneles a instalar	[Un]	248
Cantidad de paneles adoptada	[Un]	240

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Por cuestiones de practicidad a la hora de instalar los paneles, se adoptó la cantidad de 240 paneles. A continuación, se ejecutó la verificación de si dicha cantidad satisface nuestras necesidades.

En pocas palabras, lo que se plasmó en la verificación es un proceso opuesto al del cálculo de la cantidad de paneles. Teniendo los datos de la cantidad de paneles adoptados y la potencia de cada uno se pudo obtener la Potencia Instalada (previamente haciendo la conversión de unidades de la potencia de cada panel de [W] a [KW]):

$$\text{Potencia Instalada [KW]} = \text{Potencia de un Panel [KW]} \times \text{Cantidad Adoptada}$$

Recordemos que para calcular la cantidad total de paneles se había aplicado una eficiencia del 85% y estimado como horas pico de producción 5,5 [h]. Con estos datos primero se calculó la potencia requerida:

$$\text{Potencia Requerida [KW]} = \text{Potencia Instalada [KW]} \times 0,85$$

Y con este valor la Energía a producir por los paneles (240):

$$\text{Energía a Producir}_{240} [\text{KWh}] = \text{Potencia Requerida [KW]} \times \text{Horas Pico [h]}$$

La siguiente tabla resume los cálculos mencionados:

Tabla 27 – Verificación de cantidad de paneles adoptada.

VERIFICACIÓN DE CANTIDAD ADOPTADA		
Cantidad de paneles adoptada	[Un]	240
Potencia de cada panel	[W]	325
	[KW]	0,33
Potencia Instalada	[KW]	78
Eficiencia estimada	[%]	85
Horas Pico Promedio	[h]	5,5
Potencia requerida	[KW]	66,3
Energía a producir por paneles (240)	[KWh]	364,65

Si bien a simple vista la verificación no satisface las necesidades energéticas del proyecto, teniendo en cuenta que se aplicó un factor del 85% de eficiencia, una diferencia de aproximadamente 12 [KWh] no afectan en este caso. Por ende, se aceptó que la cantidad de paneles sea de doscientos cuarenta (240) unidades.

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IV. 3. 4. - DISPOSICIÓN DE LOS PANELES

Posteriormente a realizar el cálculo de la cantidad de paneles que se requiere instalar, se procedió a realizar el diseño de la disposición de los mismos.

Anteriormente se mencionó que la instalación se ejecutara sobre cubierta del edificio, por lo que la disposición de cada artefacto debe ser compatible con las dimensiones de la misma. En la lámina A112 podemos ver la vista superior del edificio, sabiendo que las dimensiones en planta del mismo son 50 x 25 [m]. Ahora bien, sabiendo que cada panel mide 1 x 2 [m] y que se encontrará instalado con una inclinación de 30°, se puede calcular la superficie proyectada:

VISTA LATERAL PANEL

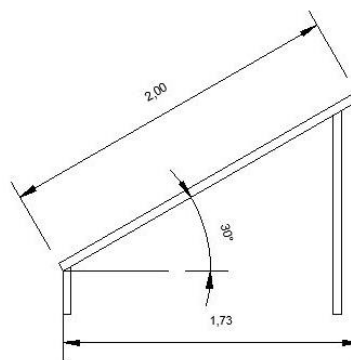


Ilustración 44 – Vistas del Panel Tipo a Instalar.

$$CA = \cos(30^\circ) \times H = \cos(30^\circ) \times 2 = 1,73 \text{ [m]}$$

Por lo tanto, la superficie proyectada del panel será de 1 x 1,73 [m].

Se dispusieron entonces, sobre la cubierta libre, seis (6) filas de cuarenta (40) paneles cada una, completando los doscientos cuarenta (240) paneles necesarios. La superficie proyectada ocupada por los paneles será de 40 x 17,5 [m] ya que entre cada fila de paneles se dejará un (1) metro de por medio para facilitar mantenimientos futuros.

IV. 3. 5. - AMORTIZACIÓN ECONÓMICA

Luego de obtener la cantidad de paneles a colocar para cubrir el 20% del consumo de cada edificio, se realizó un cálculo para obtener el tiempo en el que el ahorro de energía amortizaba la inversión de los paneles.

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Lo primero que se debió obtener fue la energía generada por día por hora como el producto entre la potencia requerida y el porcentaje de generación por hora:

Tabla 28 – Generación de energía diaria.

Horas	Coef. De Generación horaria	E. generada/hora [kW]
0	0,0000	0
1	0,0000	0
2	0,0000	0
3	0,0000	0
4	0,0000	0
5	0,0000	0
6	0,0000	0
7	0,0000	0
8	0,0200	1,32
9	0,1500	9,9
10	0,5500	36,3
11	0,6900	45,54
12	0,7400	48,84
13	0,7600	50,16
14	0,7600	50,16
15	0,7200	47,52
16	0,5900	38,94
17	0,4000	26,4
18	0,1000	6,6
19	0,0200	1,32
20	0,0000	0
21	0,0000	0
22	0,0000	0
23	0,0000	0
24	0,0000	0
	5,5000	363,0000

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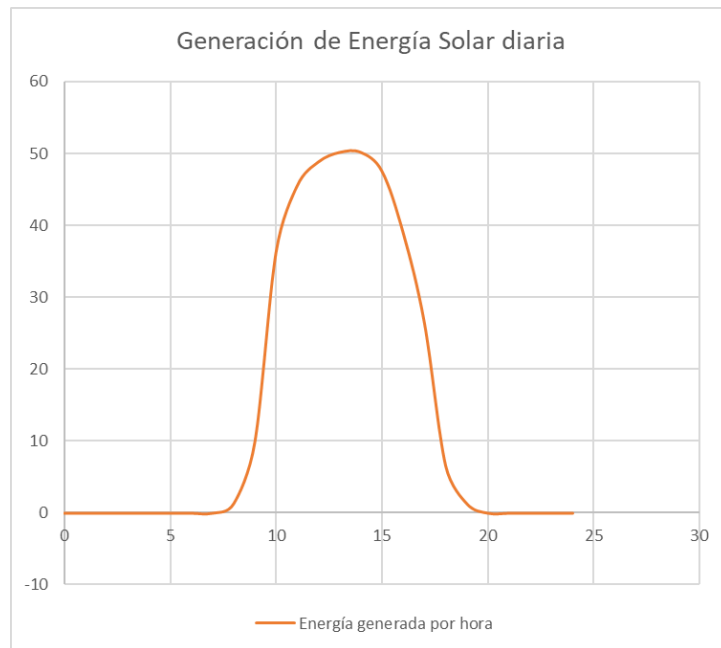


Gráfico 4 – Distribución de energía generada en un día.

Como segundo paso, se realizó la suma del consumo diario total por horas y se la restó a la generación. De esta manera se obtuvo la cantidad de energía que se consumiría de la red de EPEC.

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Tabla 29 – Resumen de Consumos y generaciones diarias.

Hora	Lumin	Comp	Climt	TOTAL	Generada	EPEC
[h]	[KWh]			[KWh]	[KWh]	[KWh]
0	0,000	0,000	0,000	0,000	0,000	0,000
1	0,000	0,000	0,000	0,000	0,000	0,000
2	0,000	0,000	0,000	0,000	0,000	0,000
3	0,000	0,000	0,000	0,000	0,000	0,000
4	0,000	0,000	0,000	0,000	0,000	0,000
5	0,000	0,000	0,000	0,000	0,000	0,000
6	0,000	0,000	0,000	0,000	0,000	0,000
7	0,000	0,000	0,000	0,000	0,000	0,000
8	3,515	41,600	0,000	45,115	1,320	43,795
9	8,086	124,800	43,605	176,490	9,900	166,590
10	9,103	145,600	65,407	220,110	36,300	183,810
11	9,103	145,600	87,209	241,913	45,540	196,373
12	7,896	124,800	43,605	176,301	48,840	127,461
13	8,267	83,200	87,209	178,676	50,160	128,516
14	8,254	104,000	87,209	199,464	50,160	149,304
15	8,293	145,600	43,605	197,498	47,520	149,978
16	7,115	62,400	87,209	156,725	38,940	117,785
17	6,890	62,400	65,407	134,697	26,400	108,297
18	5,755	62,400	43,605	111,759	6,600	105,159
19	3,510	41,600	0,000	45,110	1,320	43,790
20	0,000	0,000	0,000	0,000	0,000	0,000
21	0,000	0,000	0,000	0,000	0,000	0,000
22	0,000	0,000	0,000	0,000	0,000	0,000
23	0,000	0,000	0,000	0,000	0,000	0,000
24	0,000	0,000	0,000	0,000	0,000	0,000
	85,786	1144,000	654,070	1883,856	363,000	1520,856

Con todos estos datos, se pudo calcular cual sería el gasto mensual en energía eléctrica. Se plantearon dos escenarios: sin generación de energía y con generación de energía. Para realizar este cálculo se tuvieron en cuenta los siguientes factores:

- 20 días al mes de consumo (solo días hábiles).
- Precio del KW = \$ 8,45 (según factura de EPEC).

El precio del kilo vatio se tomó a partir de una factura de consumo energético de una vivienda, por lo que es probable que el cálculo siguiente no fuera totalmente preciso, pero si fue valido para realizar una estimación.

Para el primer escenario, se tomó el valor del consumo mensual como 1.883,856 [KW]:

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Tabla 30 – Gasto mensual de energía sin generación.

CONSUMO DE RED (Sin Generación)				
Días	Consumo/día [KW]	Consumo/Mes [KW]	Precio KW	Gasto Mensual
20	1883,856	37.677	\$8,45	\$318.544,94

Entonces, el monto a pagar a la empresa proveedora de energía mensualmente, en caso de que no se genere energía, sería de \$ 318.544,94.

Luego se planteó el mismo procedimiento de cálculo para el escenario donde sí se generaba energía mediante paneles solares. Para ello, se tuvo en cuenta el valor del consumo menos el generado, utilizando el consumo a cubrir por la empresa que vimos en la Tabla 29. Este valor es de 1.520,856 [KW]:

Tabla 31 – Gasto mensual de energía con generación.

CONSUMO DE RED (Con Generación)				
Días	Consumo/día [KW]	Consumo/Mes [KW]	Precio KW	Gasto Mensual
20	1520,856	30417,12	\$8,45	\$257.164,54

Era esperable que el gasto mensual disminuyera. Se realizó la resta entre ambos valores y se obtuvo que el ahorro mensual cuando el edificio produce energía solar fue de **\$61.380,40**.

Todos los cálculos que se plantearon fueron teniendo en cuenta los 20 días hábiles del mes. Sin embargo, los 10 días restantes del mes, la generación de energía se mantiene activa. En el proyecto no se plantearon baterías para el almacenamiento de la misma por lo que en dichos días, la energía producida se entregará a la red, es decir, se le vendería a la empresa proveedora la energía que se produjo. El cálculo de esta ganancia gracias a la venta de energía es similar al del gasto mensual; ahora en vez de utilizar el dato de consumo, se utiliza el de energía generada por día y se toma un valor de \$4,00 el kilo vatio.

Tabla 32 – Cobro mensual de energía aportada a la red.

ENTREGA A RED				
Días	Generación/día [KW]	Generación /Mes [KW]	Precio KW	Cobro Mensual
10	363,000	3630,00	\$4,00	\$14.520,00

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Teniendo este dato, se pudo concluir que el ahorro real mensual sería la diferencia de los gastos con y sin generación de energía y el monto de energía vendida al entregar a la red. Este ahorro será de:

$$\text{Ahorro mensual} = (\text{Gasto s/generación} - \text{Gasto c/generación}) + \text{Monto Venta} \\ = \$61.380,40 + \$14.520,00 = \$75.900,40/\text{mensuales}$$

Entonces, el ahorro anual será de:

$$\text{Ahorro anual} = \text{Ahorro mensual} \times 12 = \$75.900,40 \times 12 = \$910.804,8$$

El tercer paso de este proceso, fue el cálculo de la inversión inicial a la hora de instalar los paneles solares. Los datos que se tuvieron en cuenta fueron:

- Cantidad de paneles: 240
- Cantidad de Inversores: 10
- Precio Panel: US\$ 180,00
- Precio Inversor: US\$ 1.200,00
- Precio Dólar: US\$ 1,00 = AR\$ 85,00
- Instalación (MO + materiales extra): 40% del total.

Tabla 33 – Cálculo de Inversión inicial.

Item	Cantidad	Precio Unit. [US\$]	Precio [US\$]	IVA [%]	IVA [US\$]
Paneles	240	\$ 180,00	\$ 43.200,00	10,50%	\$ 4.536,00
Inversor	10	\$ 1.200,00	\$ 12.000,00	10,50%	\$ 1.260,00
		TOTAL=	\$ 55.200,00	21,00%	\$ 11.592,00
Inversión	40%	-	\$ 22.080,00	-	-
		TOTAL=	\$ 77.280,00	TOTAL=	\$ 17.388,00
		TOTAL AR\$=	\$ 6.568.800,00	TOTAL AR\$=	\$1.477.980,00
			TOTAL FINAL=	\$ 8.046.780,00	

Entonces, teniendo el valor de la inversión inicial y el valor de ahorro anual, se pudo calcular la cantidad de tiempo requerida (en años) para que la inversión se amortice. Para ello, se realizó el cociente entre el monto de la inversión por el monto ahorrado:

$$\text{Amortización} = \frac{\text{Inversión}}{\text{Ahorro anual}} = \frac{\$8.046.780,00}{\$910.804,80} = 8,83 \cong 9 \text{ años}$$

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IV. 3. 6. - CÁLCULO DE PESO TOTAL DEL SISTEMA

Es importante tener en cuenta el efecto que tendrá la instalación de paneles en la estructura que se proyecta. A continuación, se llevó a cabo una serie de cálculos para obtener el peso total del sistema sobre la losa de la cubierta, teniendo en cuenta esfuerzos del viento sobre los paneles, peso de la estructura en sí, tamaño y peso de los anclajes, etc.

IV. 3. 6. a.- CÁLCULO DE ESFUERZO DEL VIENTO

▪ Desarrollo teórico del cálculo de la estructura en función del esfuerzo del viento:

En el siguiente párrafo, se describió las expresiones necesarias para calcular el esfuerzo del viento sobre la estructura. En esta primera etapa se indican las mismas sin realizar los cálculos numéricos.

En la Ilustración 45 se indica las componentes de la velocidad del viento que actúan sobre el panel.

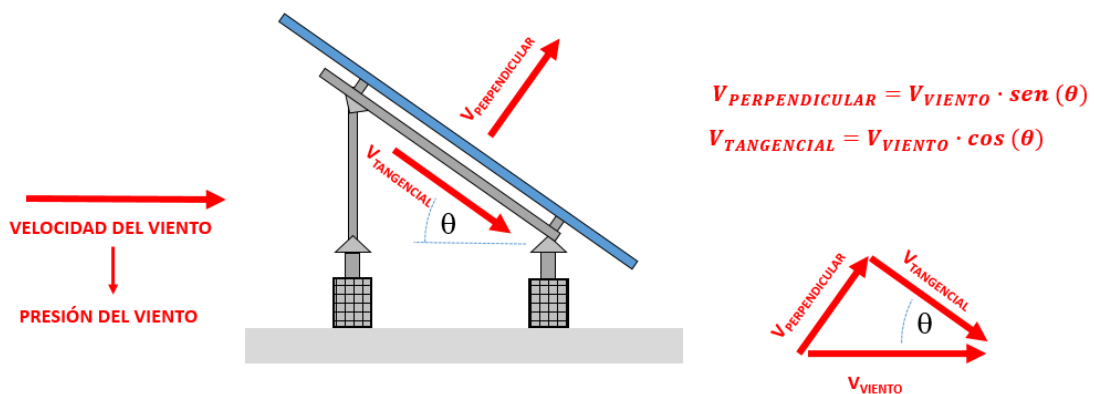


Ilustración 45 – Diagrama de velocidad del Viento.

En las ecuaciones 1 y 2, se detalla la presión del viento y la fuerza del viento sobre el panel respectivamente, ambas en función de la velocidad del viento horizontal.

$$P = 0,00625 \cdot V_{VIENTO}^2 \cdot \text{sen}^2 \theta \left[\frac{\text{kgf}}{\text{m}^2} \right]$$

Ec. 1: Presión del viento

$$F_{VIENTO} = P \cdot \text{AREA}_{PANEL} \cdot CD \left[\text{kgf} \right]$$

Ec. 2: Fuerza del viento

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La ecuación 3 indicada en la Ilustración 46, se detalla la presión del viento y la fuerza del viento sobre el panel respectivamente:

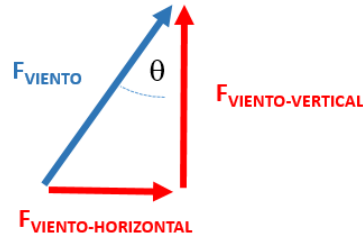


Ilustración 46 – Componentes de la Fuerza del viento.

$$F_{VIENTO_HORIZONTAL} = F_{VIENTO} \cdot \sin \theta \text{ [kgf]}$$

Ec. 3: Fuerza del viento horizontal

$$F_{VIENTO_VERTICAL} = F_{VIENTO} \cdot \cos \theta \text{ [kgf]}$$

Ec. 4: Fuerza del viento vertical

▪ Diagrama de los esfuerzos dinámicos.

Los esfuerzos dinámicos provocados por la velocidad del viento se detallan en Ilustración 47 y en la Ilustración 48. Se indican, las fuerzas que actúan en la dirección vertical y horizontal. Las mismas permiten calcular las fuerzas que actúan sobre los distintos puntos de la estructura.

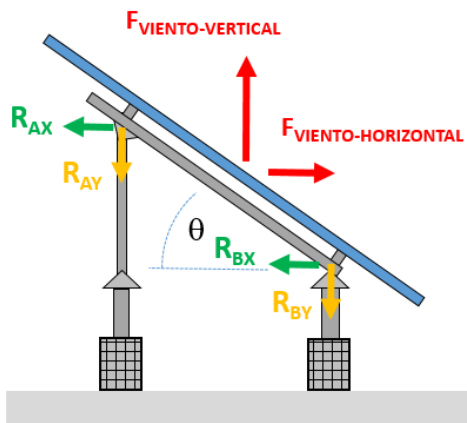


Ilustración 47 – Descomposición de fuerzas

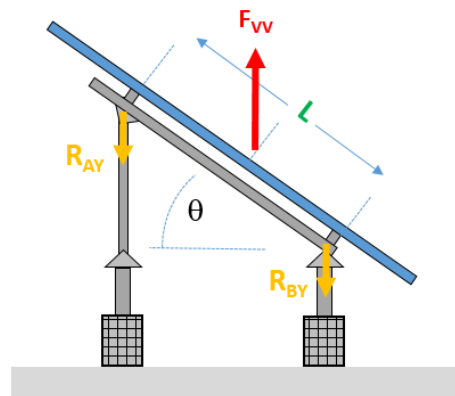


Ilustración 48 - Descomposición de fuerzas

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Estas son algunas de las expresiones utilizadas para encontrar las reacciones en cada punto de las estructuras:

$$\sum F_Y = F_{VV} - (R_{AY} + R_{BY}) = 0$$

$$\sum M_A = F_{VV} \cdot \frac{L}{2} \cdot \cos \theta - R_{BY} \cdot L \cdot \cos \theta = 0$$

$$R_{AY} = \frac{1}{2} \cdot F_{VV}$$

$$F_{VV} = R_{AY} + R_{BY}$$

$$F_{VV} \cdot \frac{L}{2} \cdot \cos \theta = R_{BY} \cdot L \cdot \cos \theta$$

$$R_{BY} = \frac{1}{2} \cdot F_{VV}$$

$$\sum F_X = F_{VH} - (R_{AX} + R_{BX}) = 0$$

$$\sum M_A = F_{VH} \cdot \frac{L}{2} \cdot \sin \theta - R_{BX} \cdot L \cdot \sin \theta = 0$$

$$R_{AX} = \frac{1}{2} \cdot F_{VH}$$

$$F_{VH} = R_{AX} + R_{BX}$$

$$F_{VH} \cdot \frac{L}{2} \cdot \sin \theta = R_{BX} \cdot L \cdot \sin \theta$$

$$R_{BX} = \frac{1}{2} \cdot F_{VH}$$

▪ Diagrama de los esfuerzos estáticos y dinámicos.

La Ilustración 49, muestra los esfuerzos estáticos y dinámicos sobre la estructura:

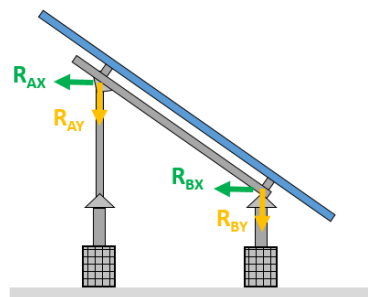


Ilustración 49 – Esfuerzos estáticos y dinámicos.

$$R_{AY} = R_{AY_E} + R_{AY_D}$$

$$R_{BY} = R_{BY_E} + R_{BY_D}$$

$$R_{AX} = R_{AX_D}$$

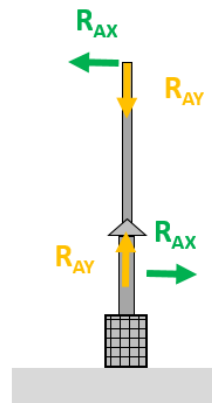
$$R_{BX} = R_{BX_D}$$

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IV. 3. 6. b.- CÁLCULO DEL ANCLAJE PARA LA ESTRUCTURA

▪ Diagrama del anclaje.

La Ilustración 50, muestra un diagrama que permite calcular las dimensiones de la fundación:



$$R_{AY} = R_{AY_E} + R_{AY_D}$$

$$R_{AX} = R_{AX_D}$$

$$P_{Hormigón} = \rho \cdot \text{Volúmen} \cdot g$$

Ilustración 50 – Diagrama de anclaje de Hormigón.

▪ Velocidad del Viento según zona.

El anclaje debido al viento se calcula a partir de la Norma CIRSOC 102 – 2005. La velocidad del viento para la ciudad de Córdoba es 45 m/s. En la Ilustración 51 se muestra el mapa de vientos máximos de la República Argentina y en la Ilustración 52 se detallan por ciudades.

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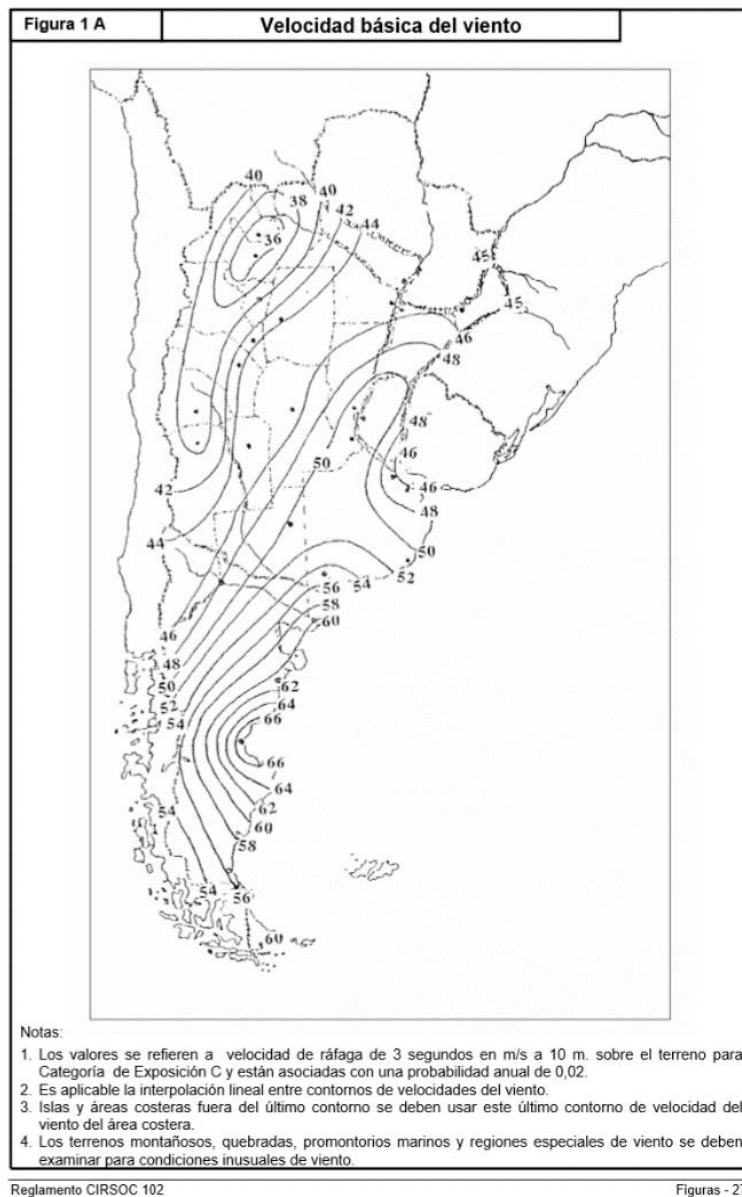


Ilustración 51 – Mapa de Velocidad de Vientos en la Rep. Argentina

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Figura 1 B		Velocidades básicas del viento en ciudades	
		CIUDAD	V (m/s)
		BAHIA BLANCA	55,0
		BARIOLOCHE	46,0
		BUENOS AIRES	45,0
		CATAMARCA	43,0
		COMODORO RIVADAVIA	67,5
		CORDOBA	45,0
		CORRIENTES	46,0
		FORMOSA	45,0
		LA PLATA	46,0
		LA RIOJA	44,0
		MAR DEL PLATA	51,0
		MENDOZA	39,0
		NEUQUEN	48,0
		PARANA	52,0
		POSADAS	45,0
		RAWSON	60,0
		RESISTENCIA	45,0
		RIO GALLEGOS	60,0
		ROSARIO	50,0
		SALTA	35,0
		SANTA FE	51,0
		SAN JUAN	40,0
		SAN LUIS	45,0
		SAN MIGUEL DE TUCUMAN	40,0
		SAN SALVADOR DE JUJUY	34,0
		SANTA ROSA	50,0
		SANTIAGO DEL ESTERO	43,0
		USHUAIA	60,0
		VIEDMA	60,0

Nota:
Los valores se refieren a velocidad de ráfaga de 3 segundos en m/s a 10 m. sobre el terreno para Categoría de Exposición C y están asociadas con una probabilidad anual de 0,02.

Reglamento Argentino de Acción del Viento sobre las Construcciones

Figuras - 28

Ilustración 52 – Velocidades de Vientos por Ciudad.

Los datos que se tiene en cuenta para el cálculo del anclaje son los siguientes:

- Velocidad del viento= 45 [m/s]

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- Dimensiones del panel= 2 x 1 [m]
- Ángulo de Inclinación= 30°
- Cantidad de Paneles= 240
- Cantidad de Filas= 6
- Cantidad de Paneles por fila = 40
- Cantidad de Apoyos por Fila= 2

Fuerza del Viento:

$$P = 0,0625 \cdot V_{VIENTO}^2 \cdot \text{sen}^2 \theta \left[\frac{kgf}{m^2} \right] = 0.0625 \cdot (45)^2 \cdot (\text{sen } 31.44)^2 = 31,64 \left[\frac{kgf}{m^2} \right]$$

$$F_{VIENTO} = 36,81 \cdot 2 \cdot 0,9 [kgf] = 66,258 [kgf]$$

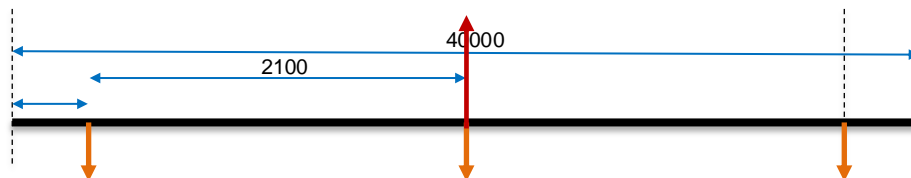
Fuerza del Viento por Fila (40 paneles):

$$F_{VGPFV1} = 40 \cdot 56,95 [kgf] = 2650 [kgf]$$

$$F_{VHGPFV1} = F_{VGPFV1} \cdot \text{sen } 31.44 [kgf] = 2650 \cdot 0,5216 [kgf] = 1382 [kgf]$$

$$F_{VVGPFV1} = F_{VGPFV1} \cdot \cos 31.44 [kgf] = 2650 \cdot 0,8532 [kgf] = 2260 [kgf]$$

Cálculo del esfuerzo de cada anclaje por Fila:



$$\sum F_{YGPFV1} = F_{VVGPFV1} - F_{PFGPFV1} \cdot 40 = 0$$

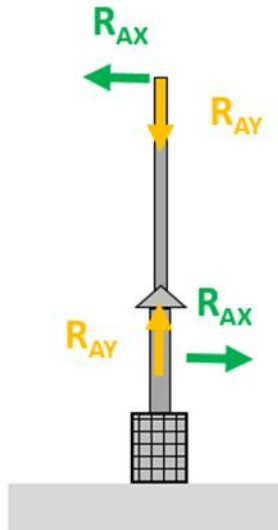
$$F_{PFGPFV1} = F_{VVGPFV1} \frac{1}{40} = 2260 \frac{1}{40} = 56.5 [kgf]$$

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El cálculo anterior corresponde a una fila de fundaciones, como son dos filas el valor obtenido se debe dividir por dos, siendo entonces el esfuerzo por cada fundación igual a **28.25 [Kgf]**.

Cálculo del Anclaje:

La Ilustración 53, muestra un diagrama que permite calcular las dimensiones de la fundación. Para calcular la misma se toma la reacción dinámica, porque la reacción estática corresponde al peso y esta aporta a la estabilidad de la estructura.



$$R_{AY} = R_{AY_D} = 28.25 \text{ [kgf]}$$

$$R_{AY} = P_{Hormigón} > 28.25 \text{ [kgf]}$$

$$P_{Hormigón} = \rho \cdot \text{Volúmen} \cdot g$$

$$\rho_{Hormigón} = 2400 \text{ [kg/m}^3\text{]}$$

$$V_{Hormigón} = \frac{P_{Hormigón}}{\rho_{Hormigón}} = \frac{28.25 \text{ [kgf]}}{2400 \text{ [kg/m}^3\text{]}} = 0,0118 \text{ [m}^3\text{]}$$

$$V_{Hormigón} = S_{Anclaje} \cdot L_{Anclaje}$$

$$S_{Anclaje} = \frac{V_{Hormigón}}{L_{Anclaje}} = \frac{0,0118 \text{ [m}^3\text{]}}{2 \text{ [m]}} = 0,0059 \text{ [m}^2\text{]}$$

$$S_{Anclaje} = Lado \cdot Lado = 0,0059 \text{ [m}^2\text{]}$$

$$Lado_{Anclaje} = \sqrt{0.0059} = 0,077 \text{ [m]}$$

Ilustración 53 – Diagrama de Anclaje.

IV. 3. 6. c.- CÁLCULO DEL PESO TOTAL

Con todo lo calculado, ya es posible calcular el peso total del sistema.

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Como es sabido, el peso de cada anclaje es de 28,25 [Kgf] y sabiendo que contamos con dos (2) filas de anclajes por panel y cuarenta (40) paneles por fila el peso total de los anclajes será de:

$$\text{Peso Total Anclajes por fila [Kgf]} = 28,25 \text{ [Kgf]} \times 40 \times 2 = 2.260 \text{ [kgf]}$$

Si al valor obtenido es multiplicado por la cantidad de filas, se obtiene el peso total de los anclajes sobre la losa:

$$\text{Peso Total Anclajes} = 2.260 \text{ [Kgf]} \times 6 = 13.560 \text{ [Kgf]}$$

Por otro lado, teniendo en cuenta el manual del panel seleccionado, se sabe que el peso del panel propiamente dicho es de 26 [Kgf] y el de la estructura de 30 [Kgf]. Por ende, el peso de los 240 paneles será de:

$$\text{Peso Paneles [Kgf]} = 240 \times (26 + 30) = 13.440 \text{ [Kgf]}$$

Sumando estos dos valores obtenidos de pesos totales, resulta que el Peso Total sobre losa es de:

$$\text{Peso Total [Kgf]} = 13.560 + 13.440 = 27.000 \text{ [Kgf]} = 27 \text{ [tn]}$$

Dicho peso se reparte uniformemente sobre la cubierta, por lo que el Peso sobre losa por metro cuadrado será de:

$$\text{Peso Total} \left[\frac{\text{Kgf}}{\text{m}^2} \right] = \frac{27.000 \text{ [Kgf]}}{1250 \text{ [m}^2\text{]}} = 21,6 \left[\frac{\text{Kgf}}{\text{m}^2} \right]$$

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V. - CONCLUSIÓN

Por lo presentado en este trabajo, se vuelve evidente que el futuro de la investigación y el desarrollo mundial se realiza gracias a la sinergia y fuertes relaciones entre empresas y universidades. Es vital entender la oportunidad que se presenta hoy a la Universidad Católica de Córdoba de ser pionera en el desarrollo tecnológico, en la responsabilidad ambiental y el crecimiento económico social de la región. La centralización del conocimiento y el trabajo trae a nivel mundial los mayores avances de la historia.

El desarrollo del diseño íntegro y versátil que se contempló a la hora de estructurar el edificio marcó la diferencia fundamental que el grado de ingeniería conlleva. Siguiendo los consejos obtenidos mediante la investigación de antecedentes se apuntó a la eficiencia, versatilidad e integración con el diseño mundial. Se presenta la funcionalidad como condición fundamental y no solamente la estética. Basados en la experiencia de aquellos que nos precedieron y tienen años de experiencia en la disciplina es que nos propusimos este destino.

En el presente Trabajo Final, se tuvo la oportunidad de aplicar y fortalecer los conocimientos adquiridos a lo largo de la carrera al abordar un proyecto multidisciplinario, que es el caso del Master Plan y edificio, el cual requirió de un desarrollo profesional como ingenieros. A su vez, se adquirieron nuevos conocimientos en lo que respecta a software y programas computacionales. De esta manera, se pudo potencializar una formación integral, desempeñándonos como futuros profesionales plasmando los conceptos obtenidos en las diferentes materias de la carrera de Ingeniería Civil.

Como alumnos de la Universidad Católica de Córdoba, el grupo pudo reconocer las fortalezas y debilidades que se tiene como estudiantes en lo que respecta a la formación personal, teórica y técnica profesional. A partir del desarrollo del Trabajo Final, se comprendió y dimensionó la responsabilidad que se tiene como futuros profesionales; se entiende así lo que implica el título y el ejercicio profesional, concibiendo el gran compromiso que se debe tener con las generaciones presentes y las futuras.

De esta forma, y para finalizar, se considera que se cumplieron y superaron los objetivos planteados permitiendo alcanzar el grado de Ingenieros Civiles.

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VI. - BIBLIOGRAFIA

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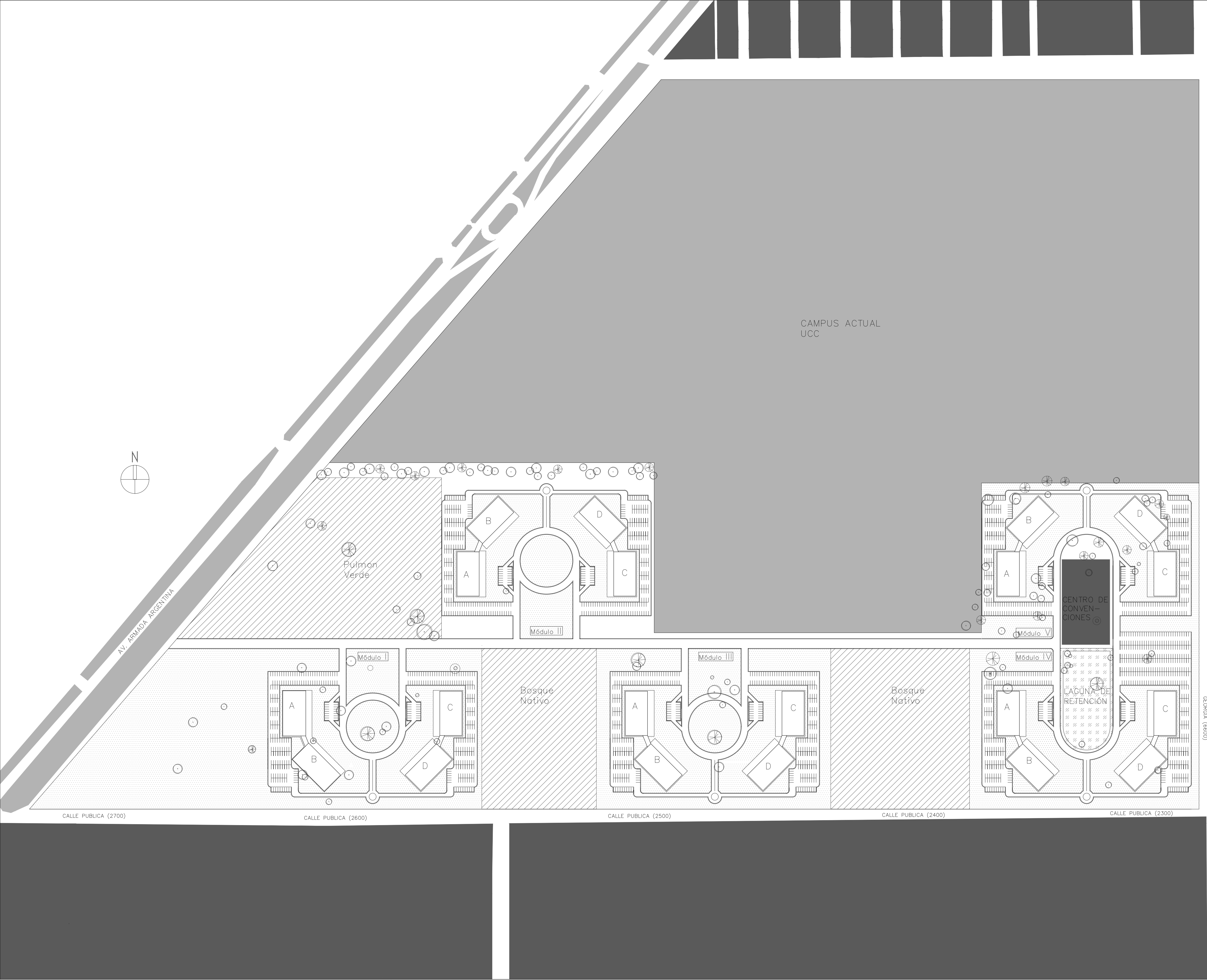
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VII. - ANEXO

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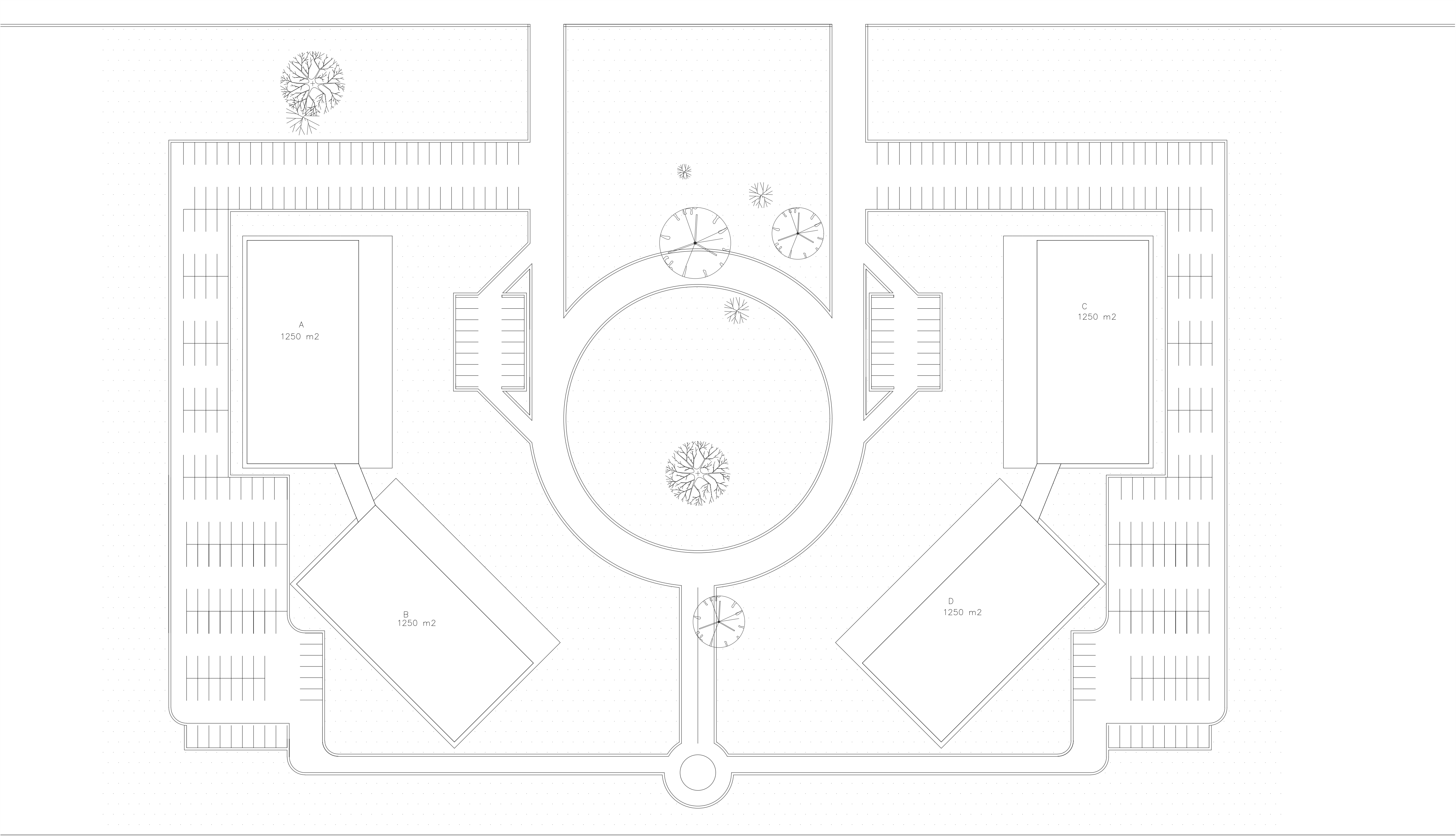
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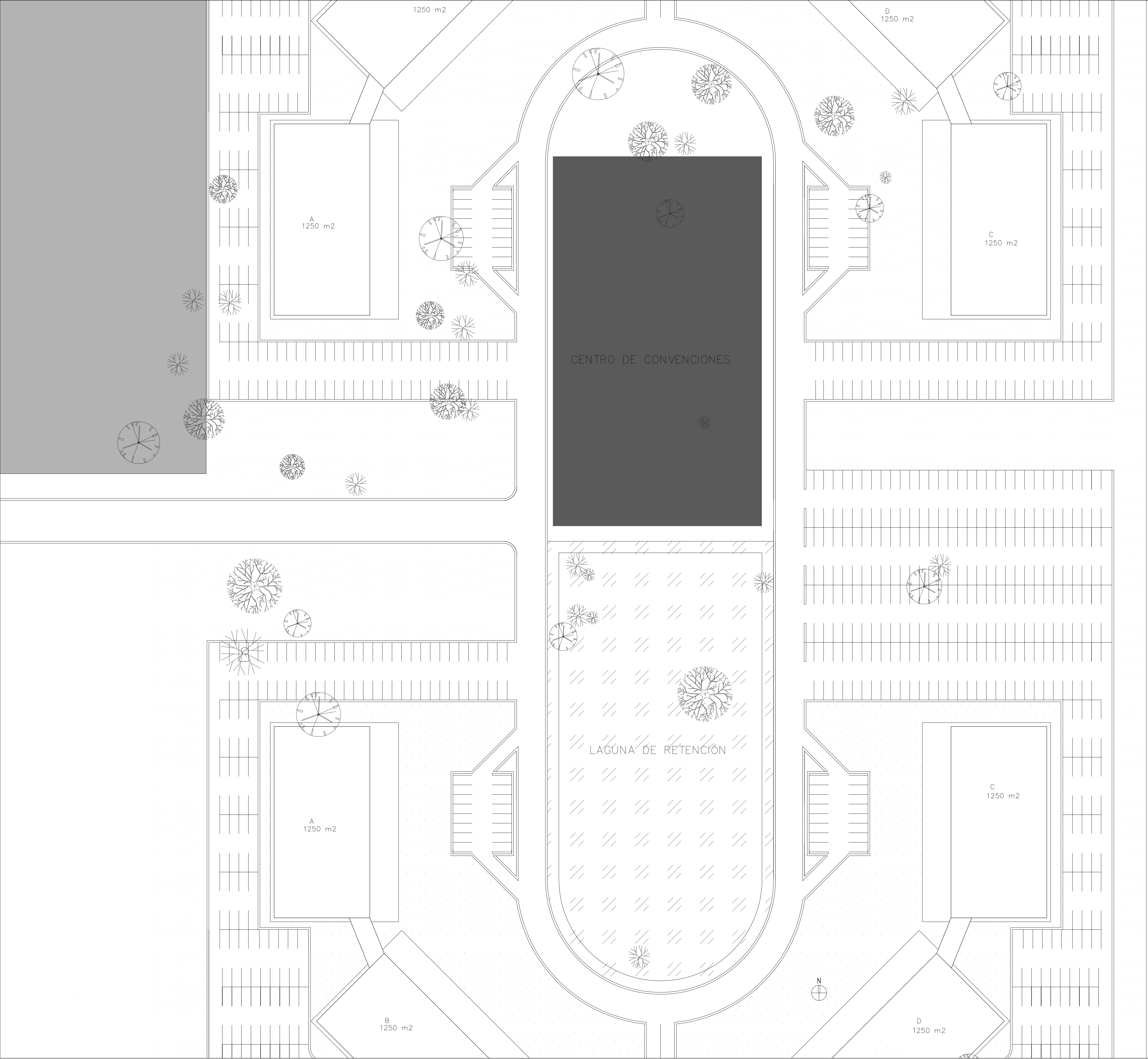
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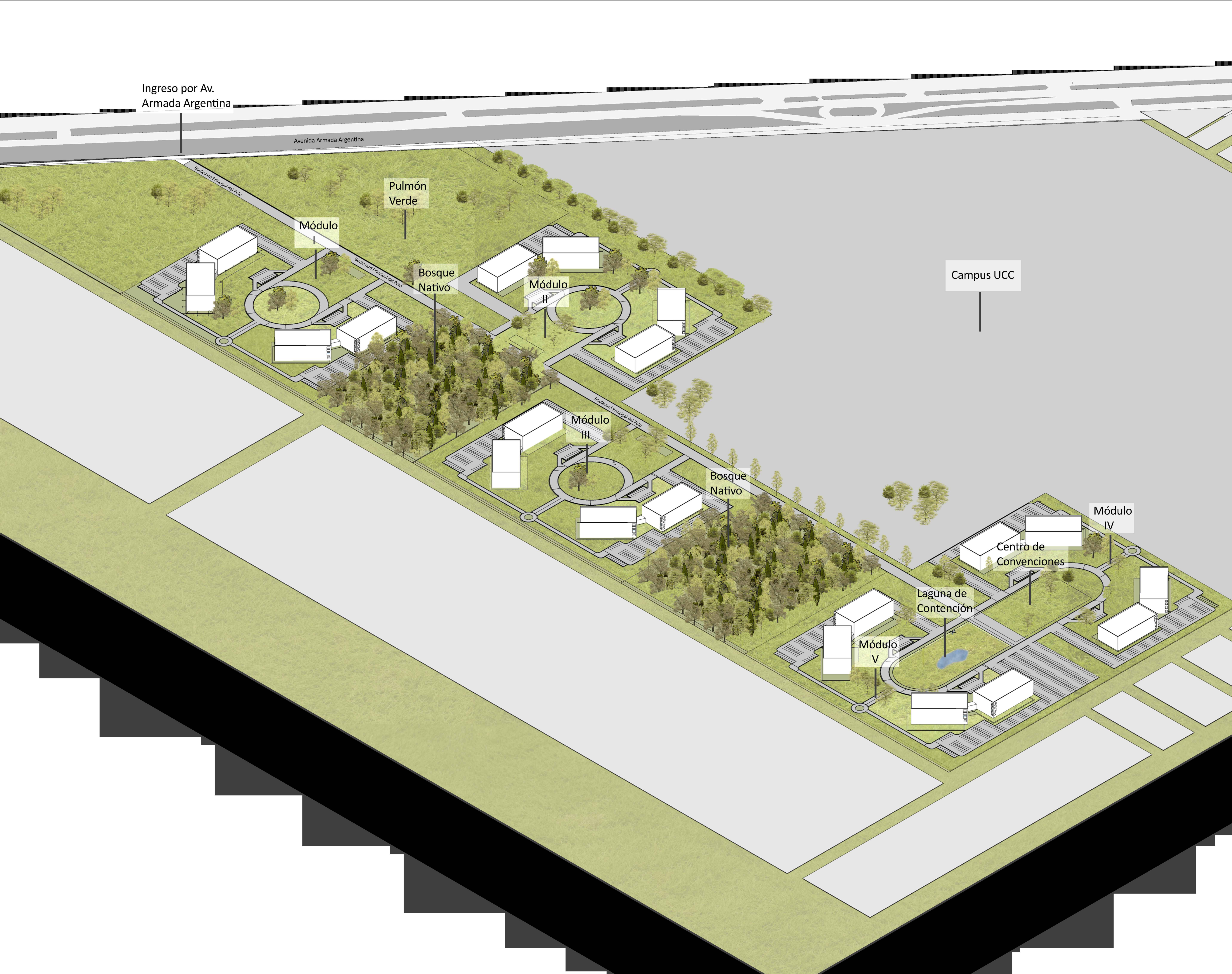
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ANEXO 100
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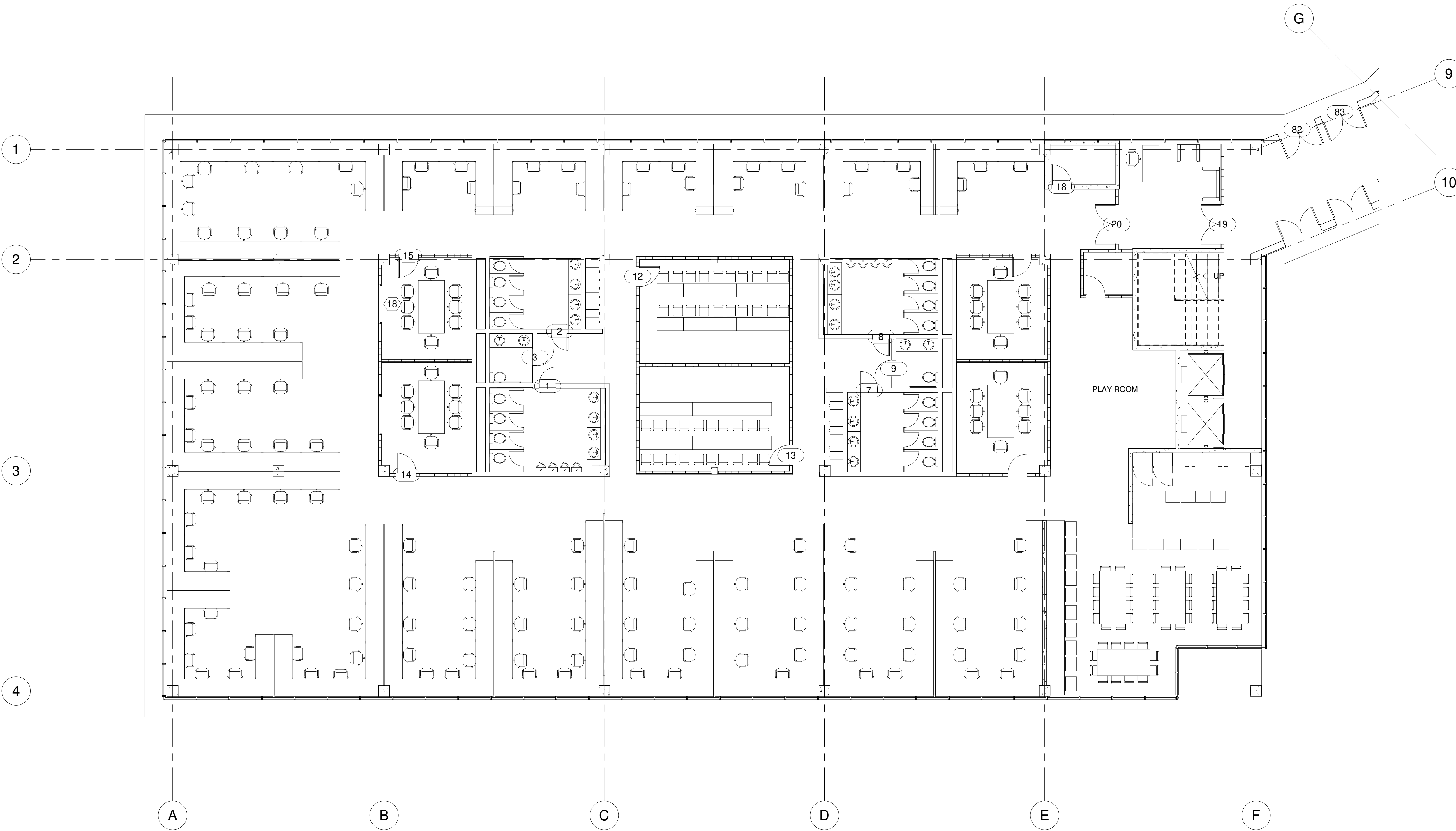
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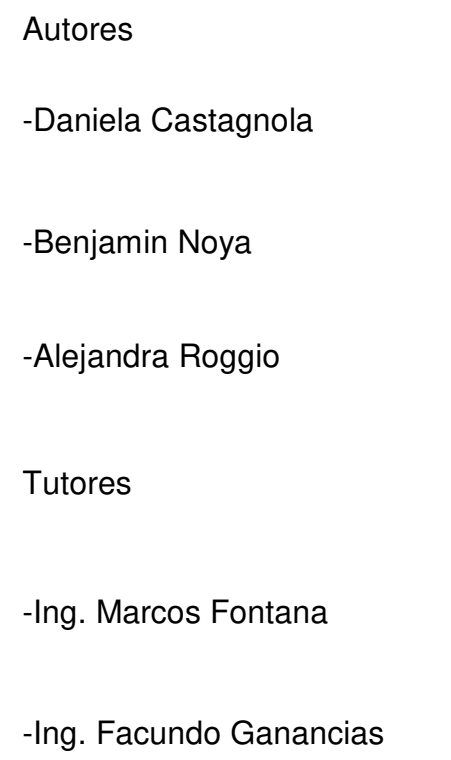
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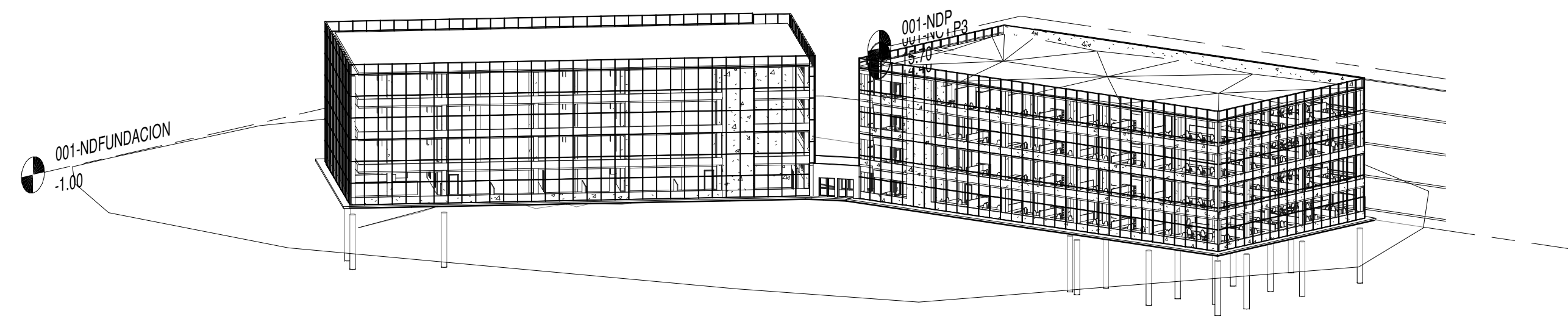


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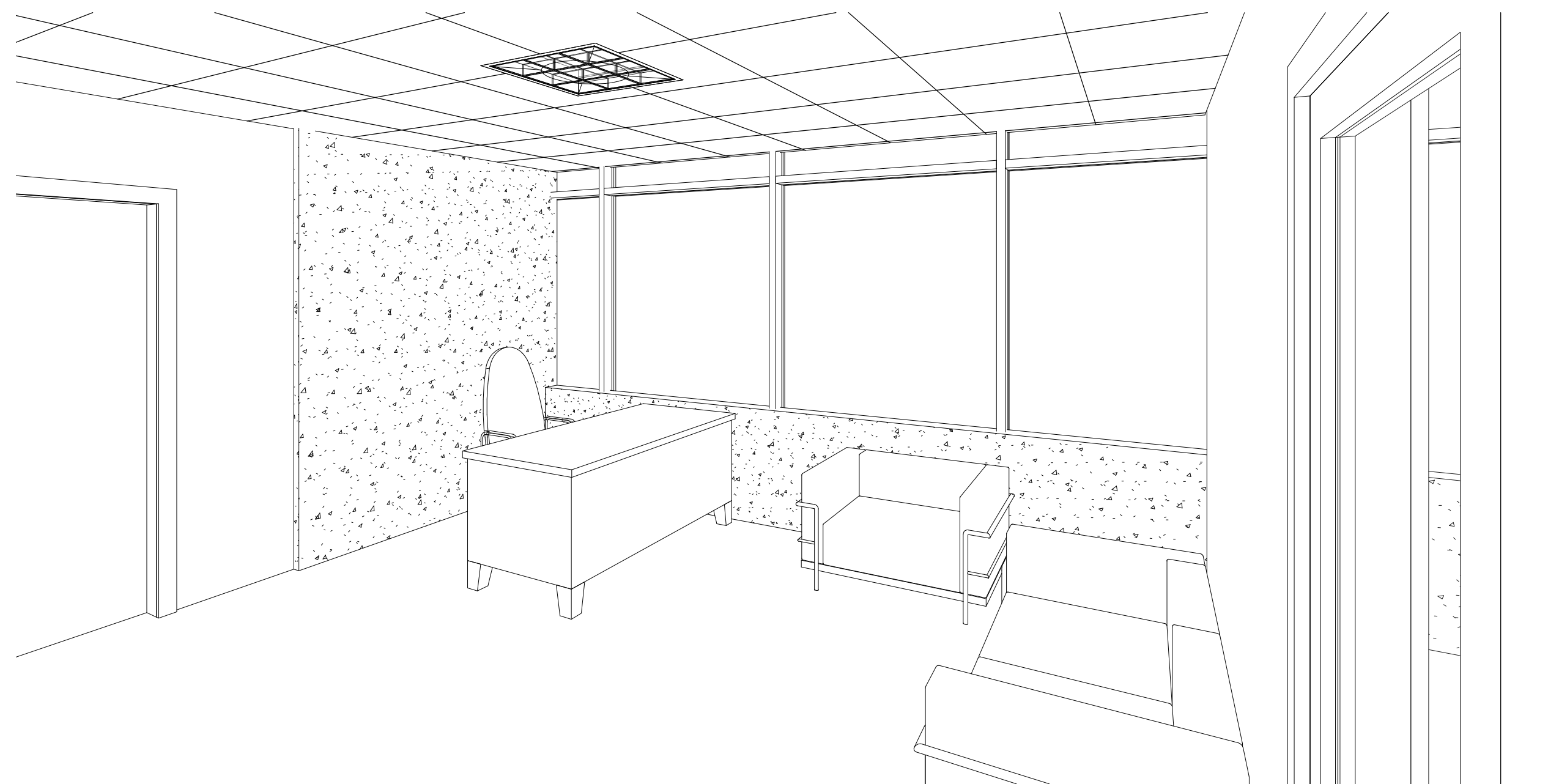
Project number	0001
Date	08/30/2020
Drawn by	Author
Checked by	Checker

Scale 1 : 200

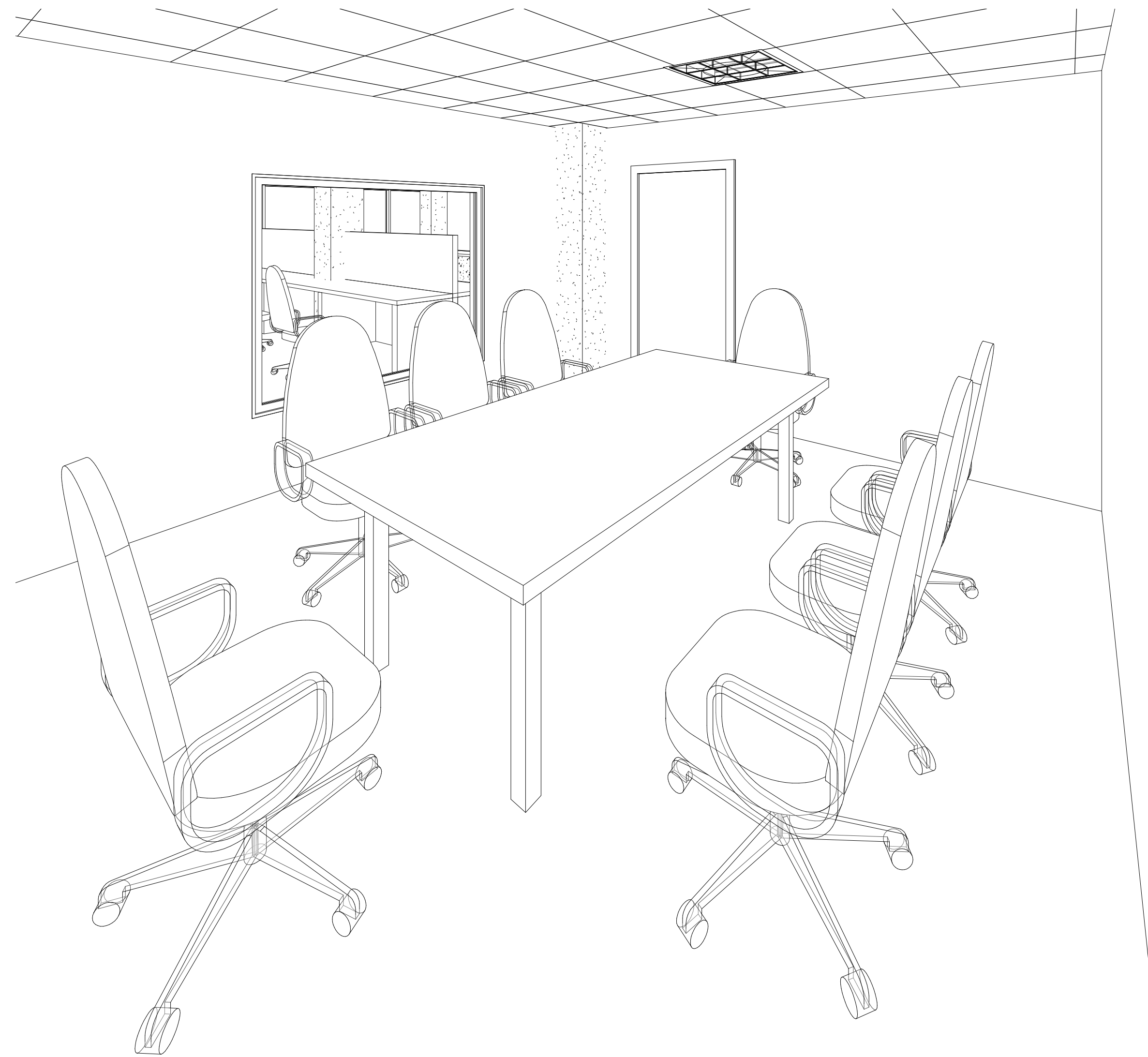




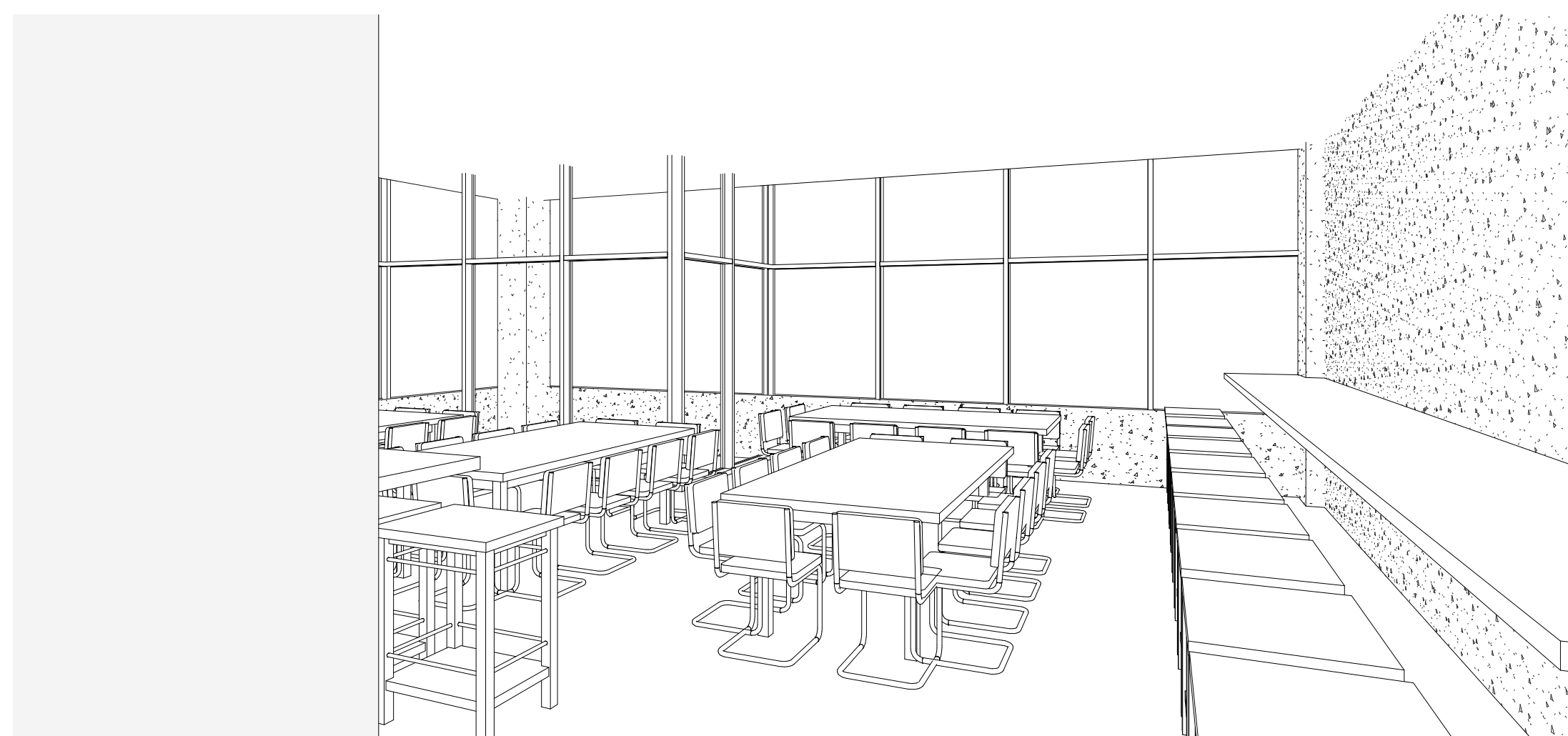
1 Visual Exterior



2 3D Recepcion



3 3D Sala de Reunion



4 3D SUM

Autores

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-Ing. Facundo Ganancias

Trabajo Final:
Polo-
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Cordoba

Vistas 3D-A

Project number 0001

Date 08/30/2020

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A103

Scale

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Trabajo Final:
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Vistas 3D-B

Project number 0001

Date 08/30/2020

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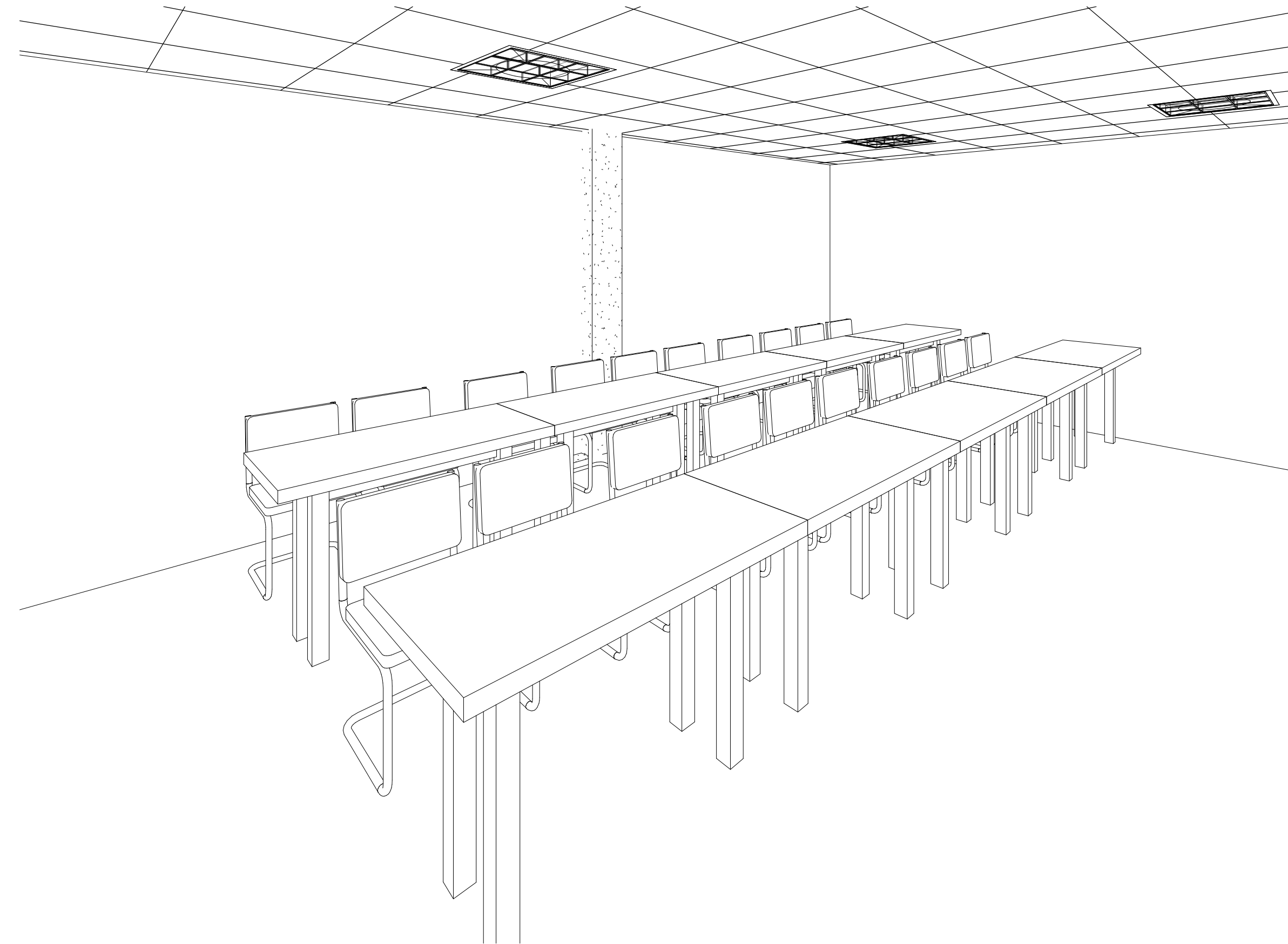
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A104

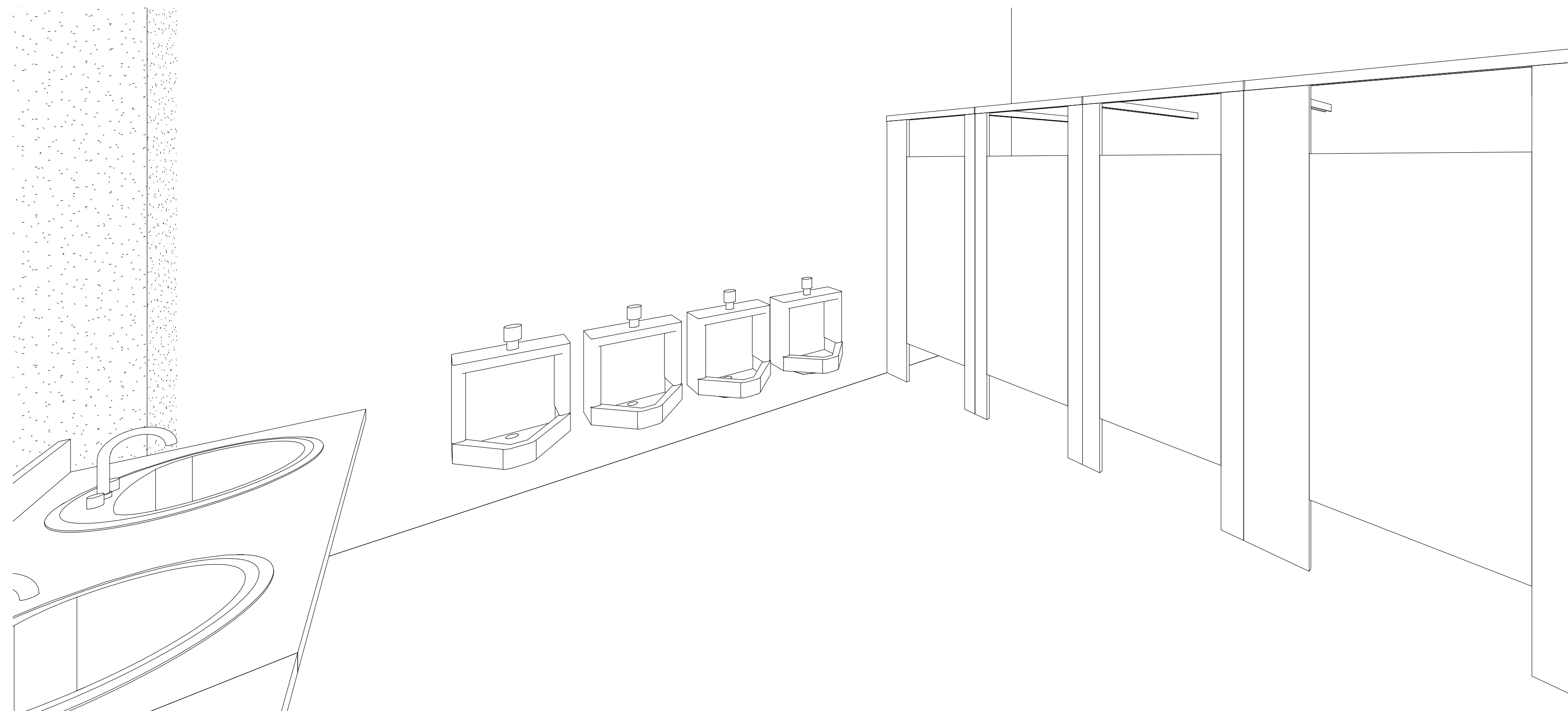
Scale



1 3D Oficinas Directorio



2 3D Sala de Capacitación



3 3D Baño

Autores

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Cortes

Project number 0001

Date 08/30/2020

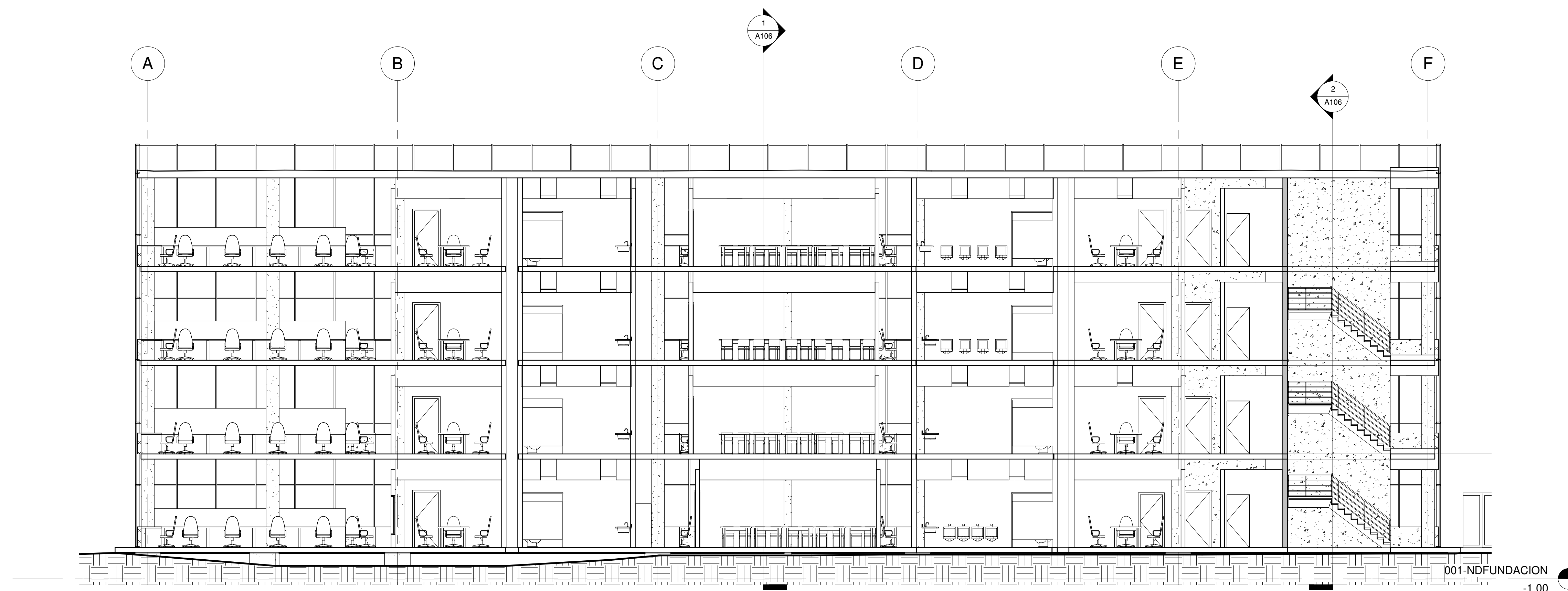
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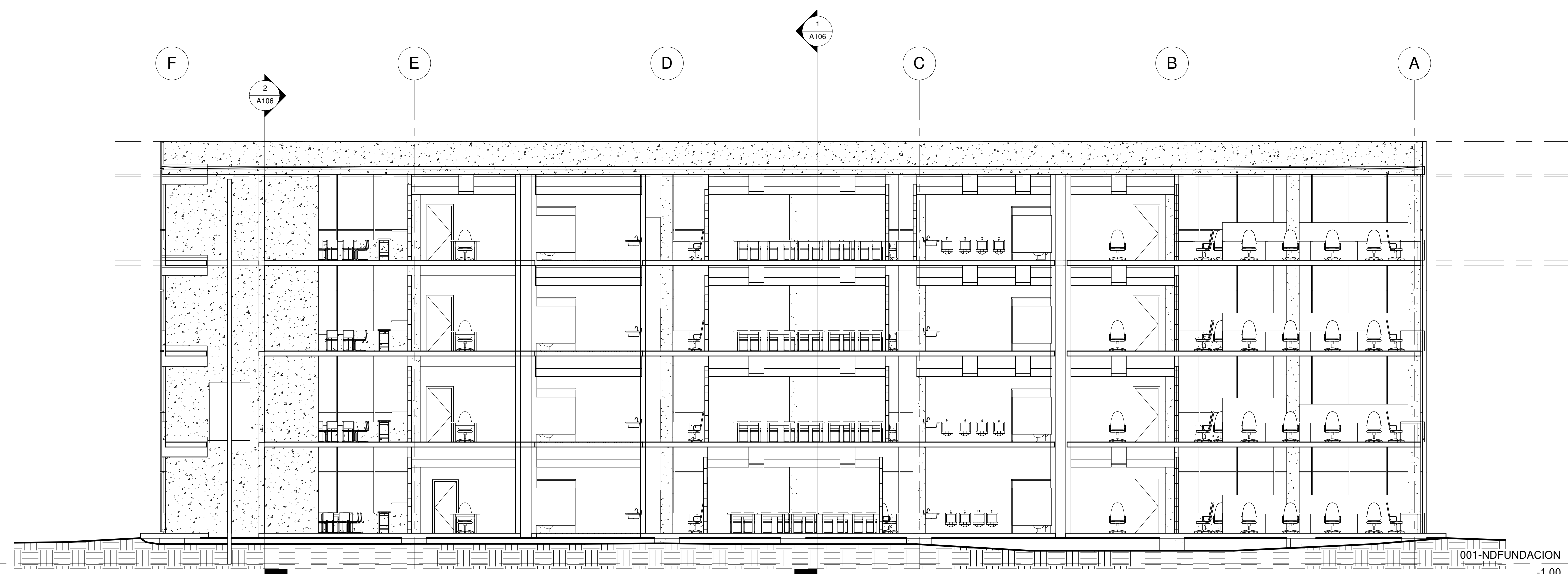
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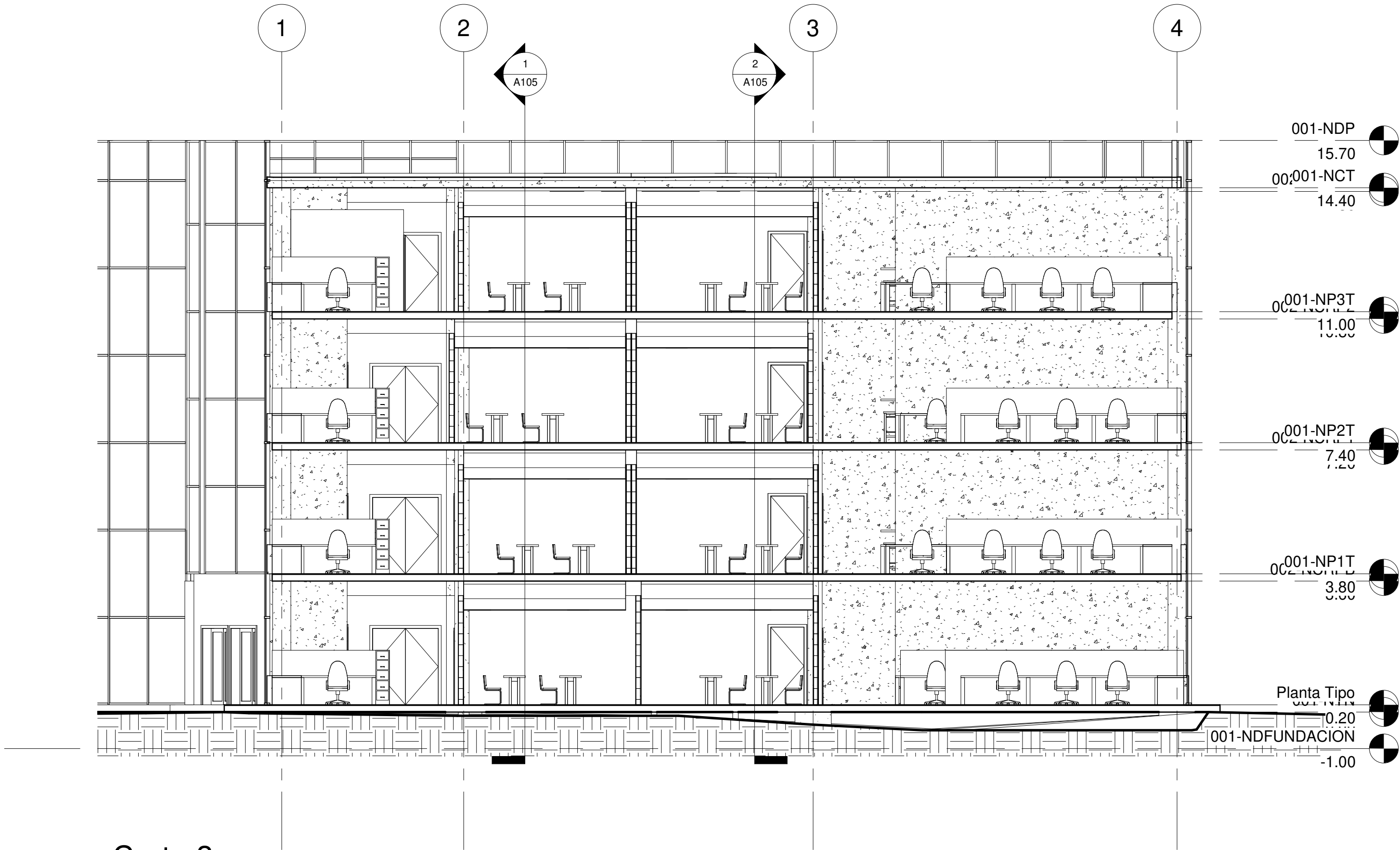
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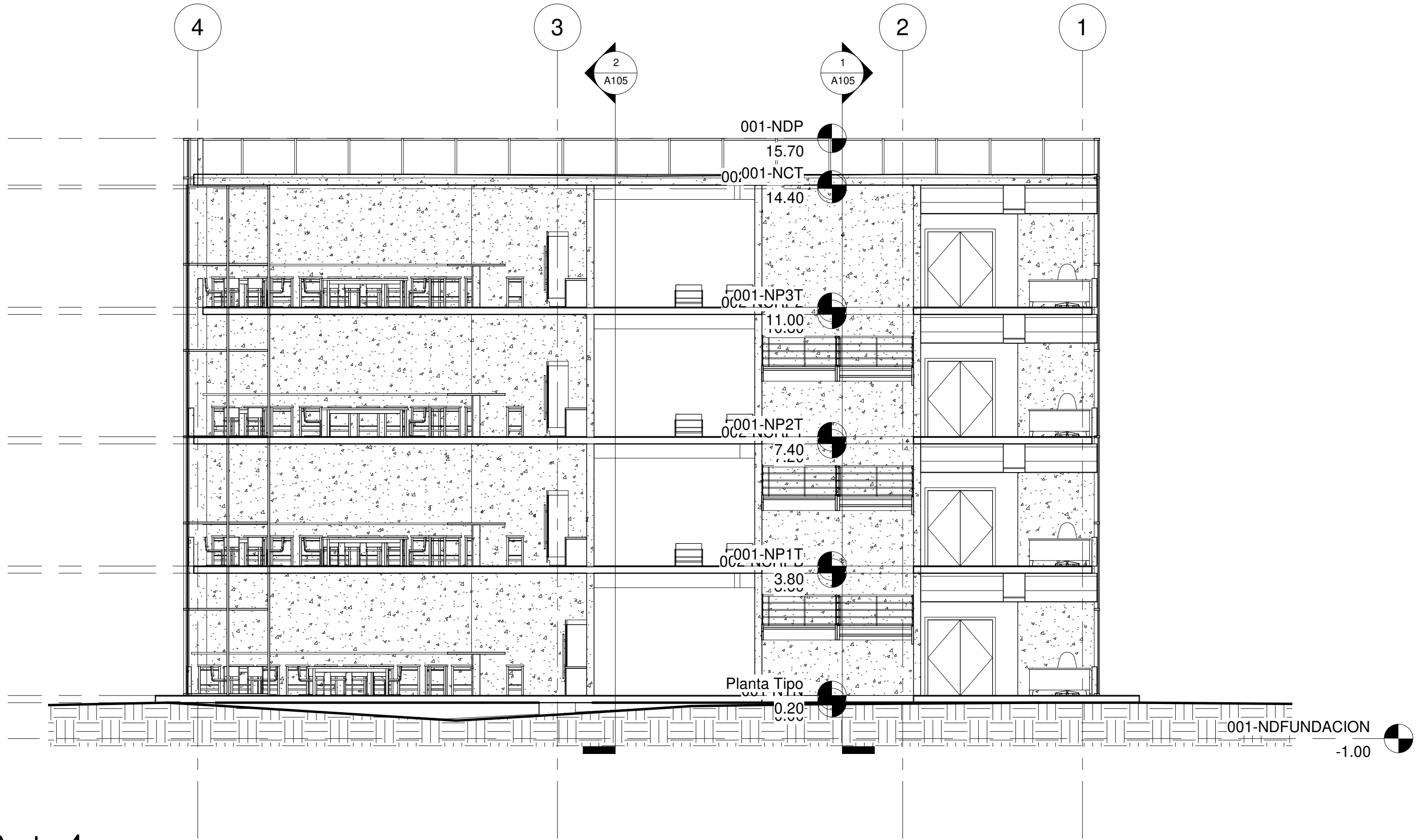
1 Corte 1
1 : 100



2 Corte 2
1 : 100



1 Corte 3
1 : 100



2 Corte 4
1 : 100

Autores
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Cortes B

Project number 0001
Date 08/30/2020
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A106

Scale 1 : 100

Autores

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Alternativa
Oficinas

Project number 0001

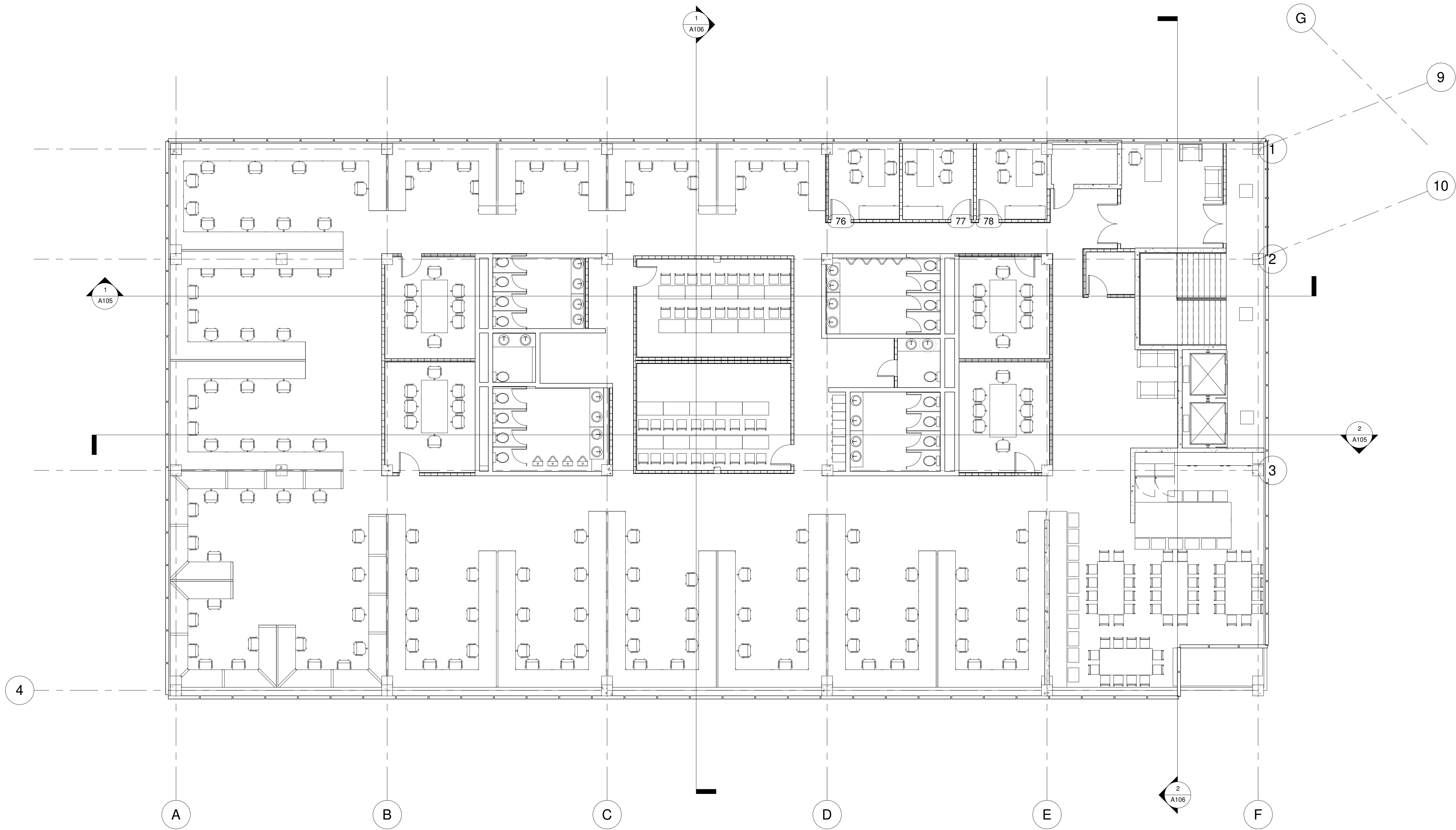
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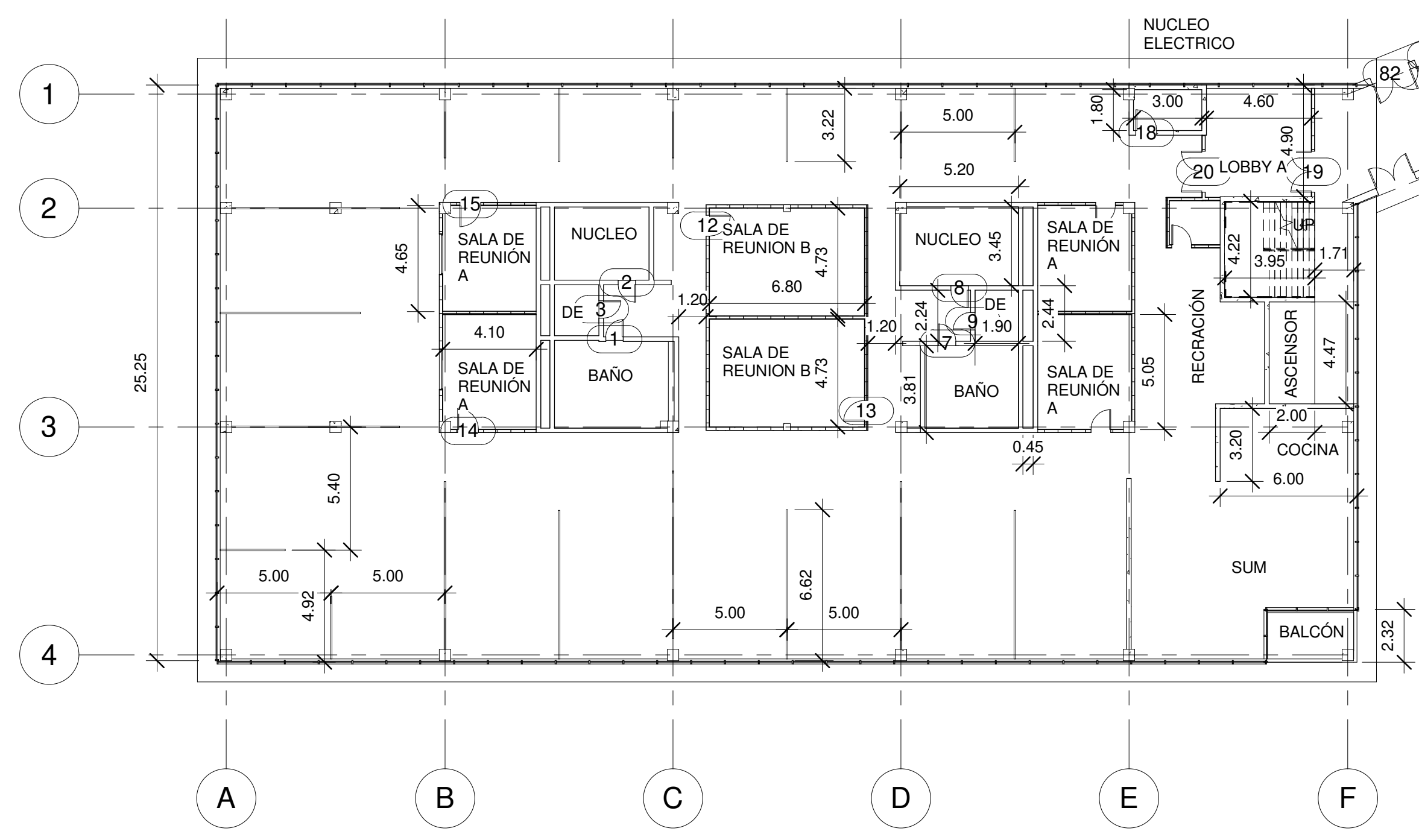
Checked by Checker

A107

Scale 1 : 100



1 Planta Alternativa
1 : 100



1 -001-NPBT
1 : 200



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Planta General

Project number	0001
Date	08/30/2020
Drawn by	Autor
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A108

Scale	1 : 200
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Plano Fachada

Project number0001

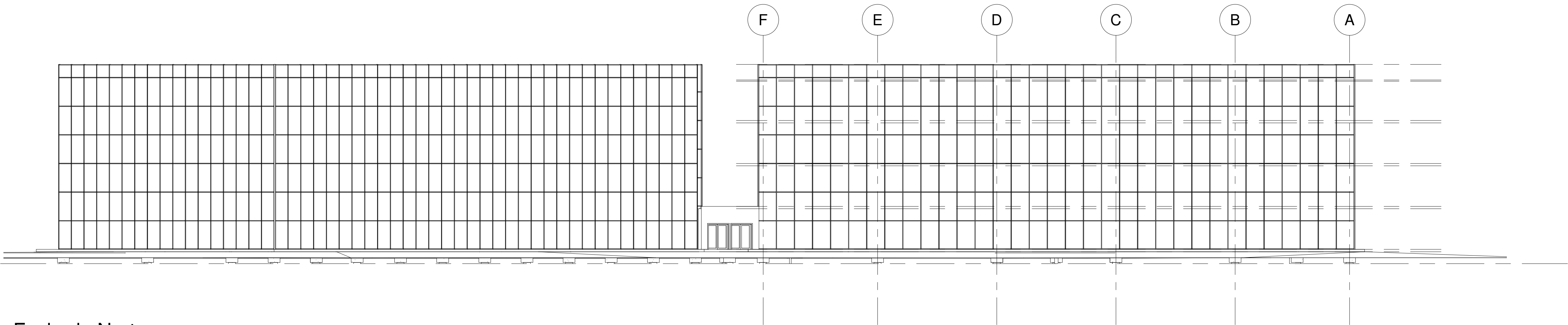
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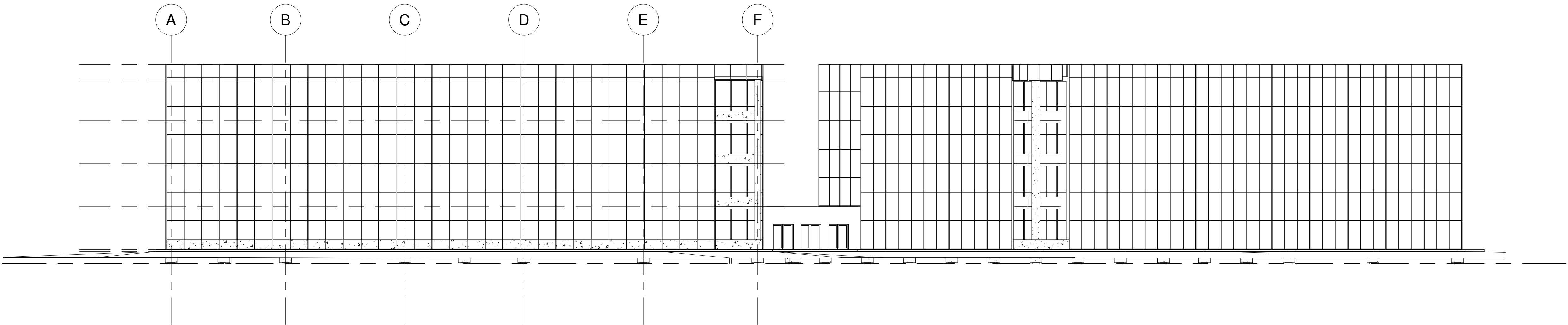
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A109

Scale1 : 200



1 Fachada Norte
1 : 200



2 Fachada Sur
1 : 200

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Plano Fachadas

Project number 0001

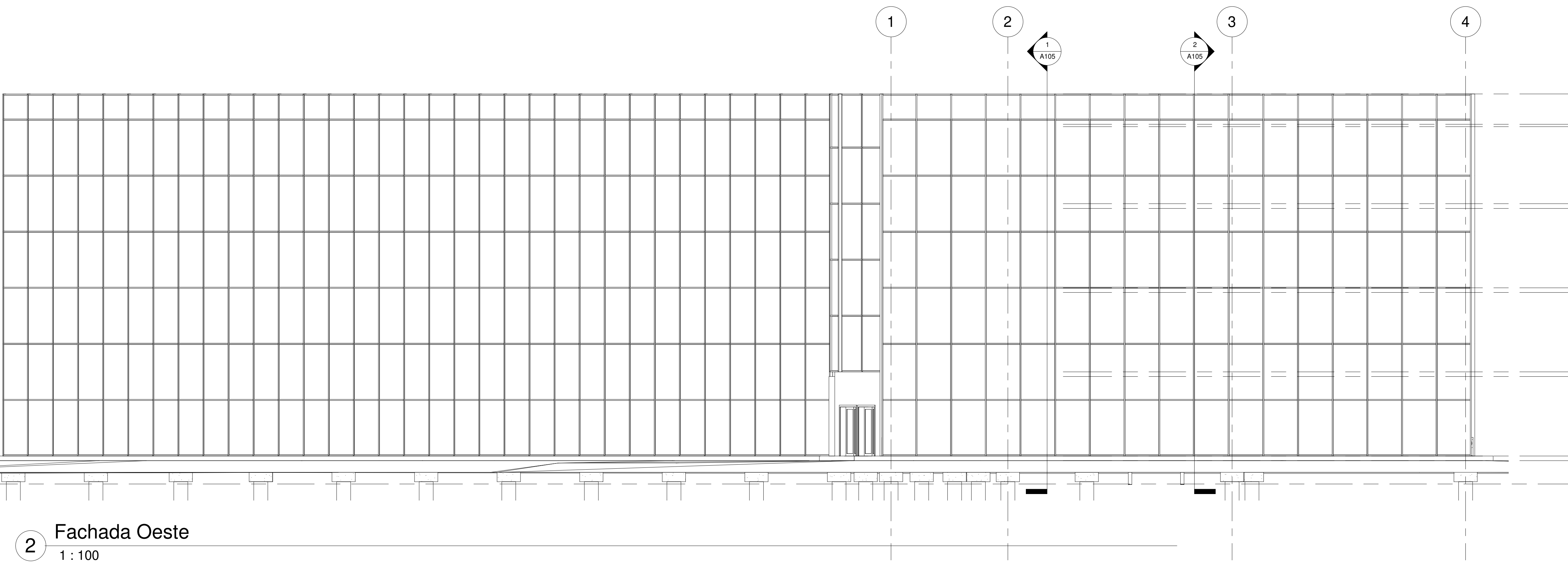
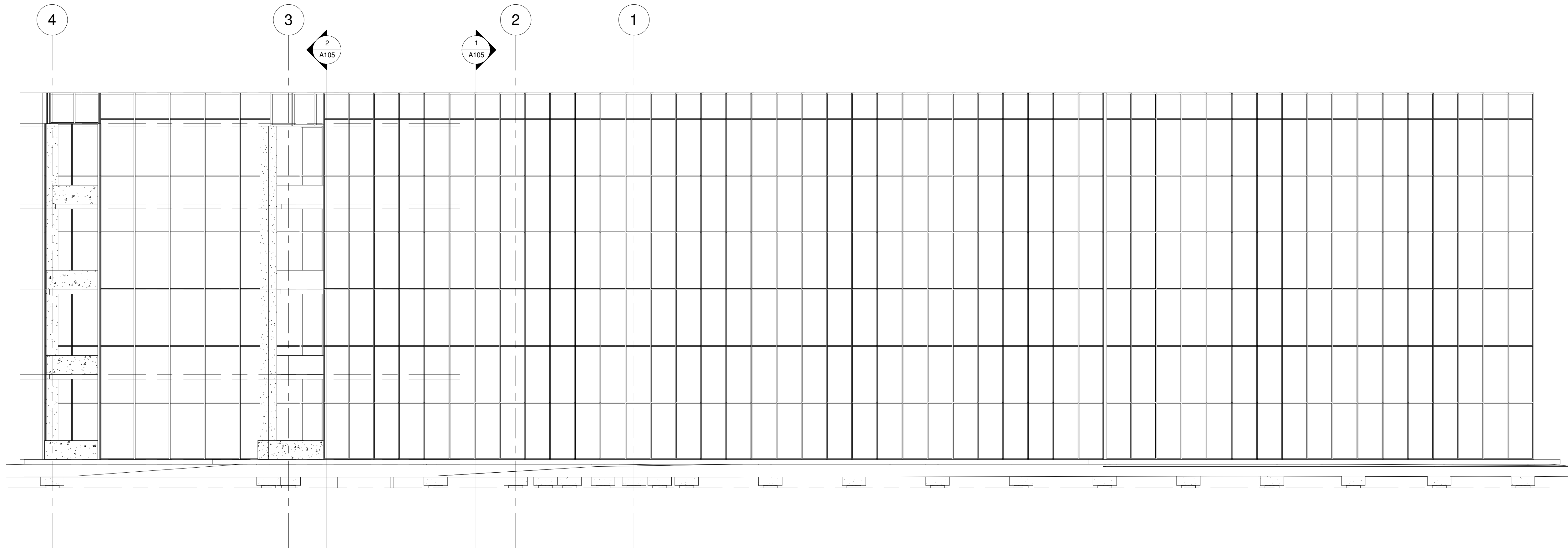
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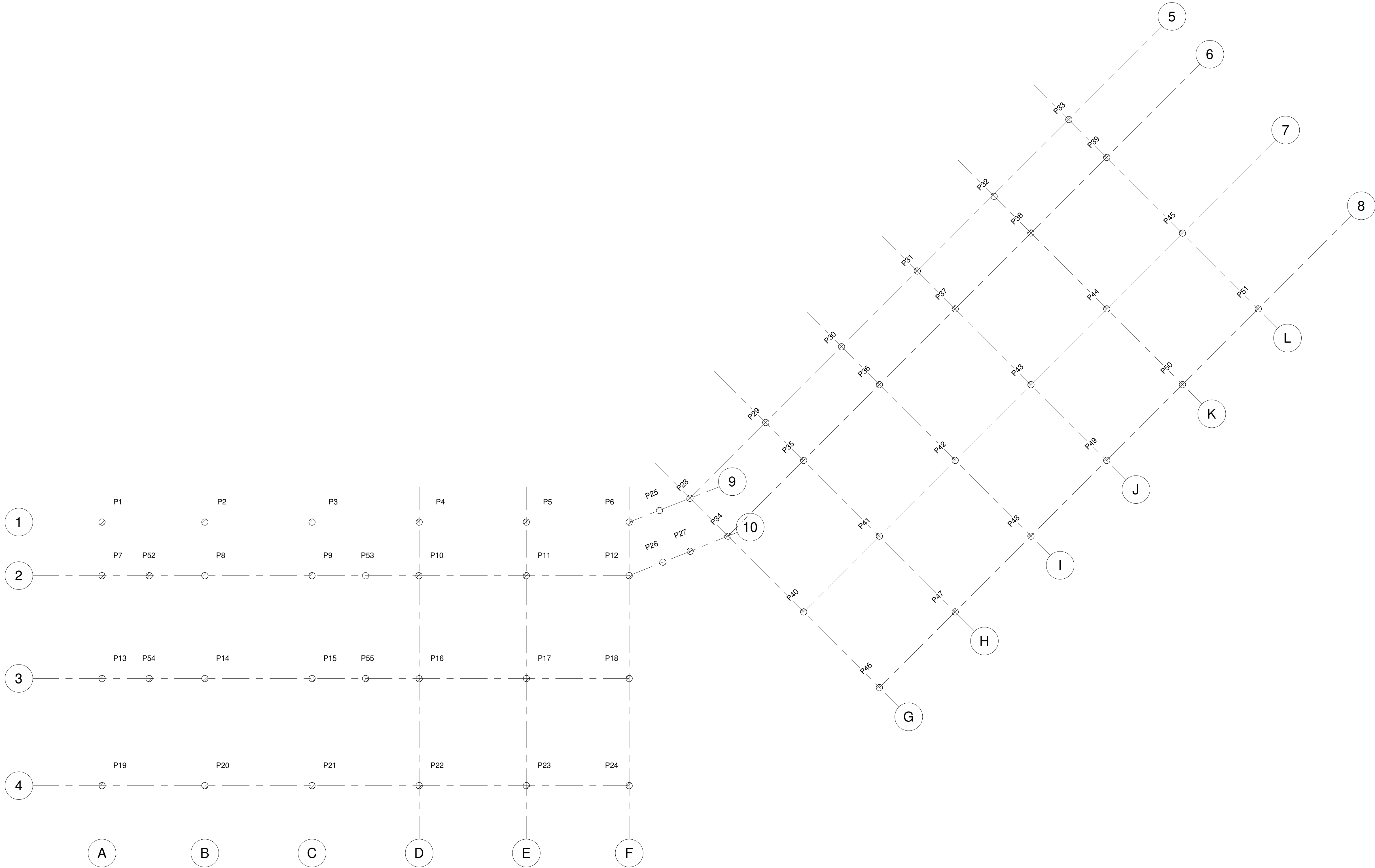
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A110

Scale 1 : 100





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Trabajo Final:
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Plano de
Fundación

Project number 0001

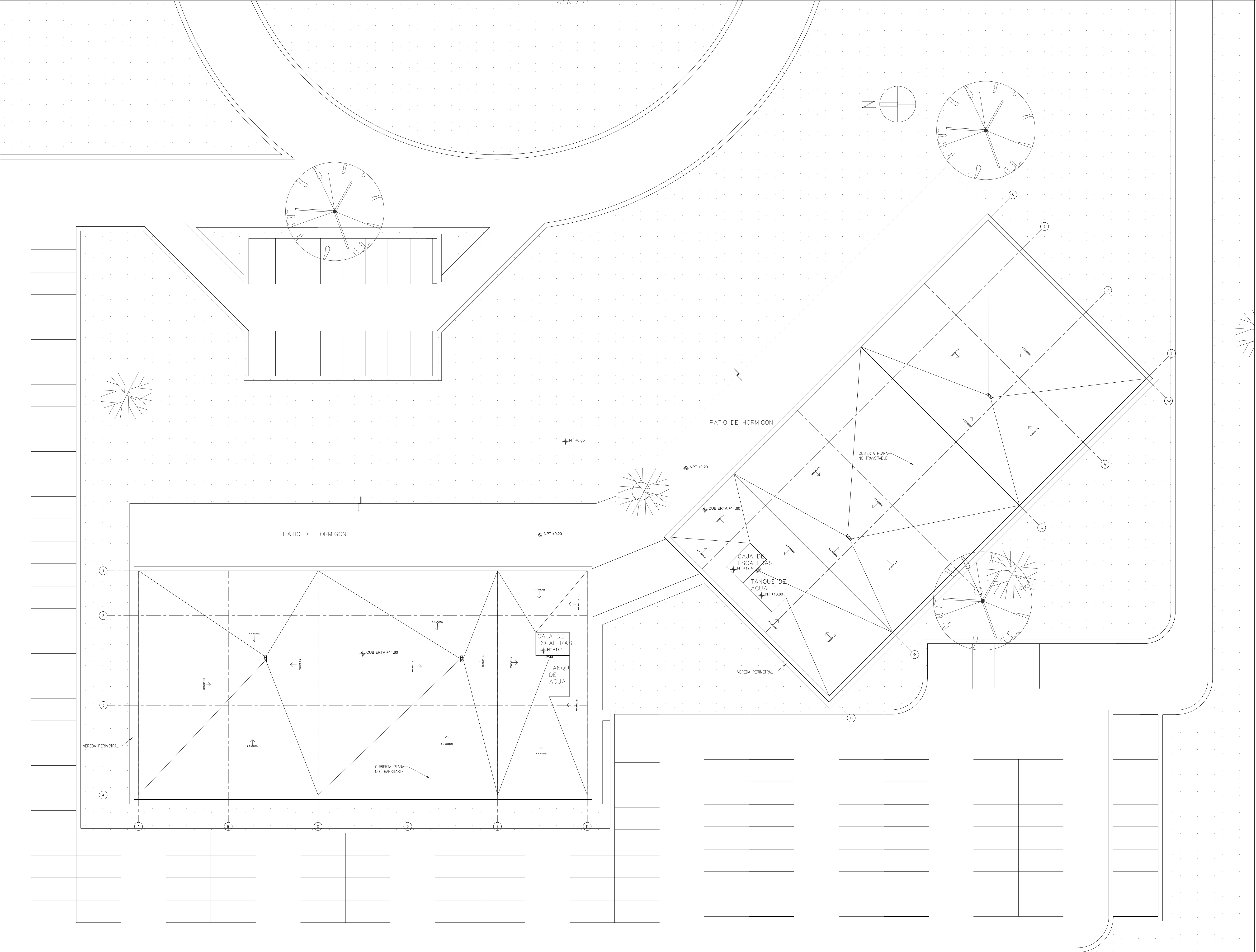
Date 08/30/2020

Drawn by Autor

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A111

Scale 1 : 200



Autores

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- Ing. Marcos Fontana
- Ing. Facundo Ganancias

Trabajo Final: Polo- Tecnologico, Master Plan

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Planimentria y
Planta de Techos

Project number 0001

Date 21/10/2020

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A112

Scale 1 : 200



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-Ing. Facundo Ganancias

Trabajo Final:
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Fachada Edificio

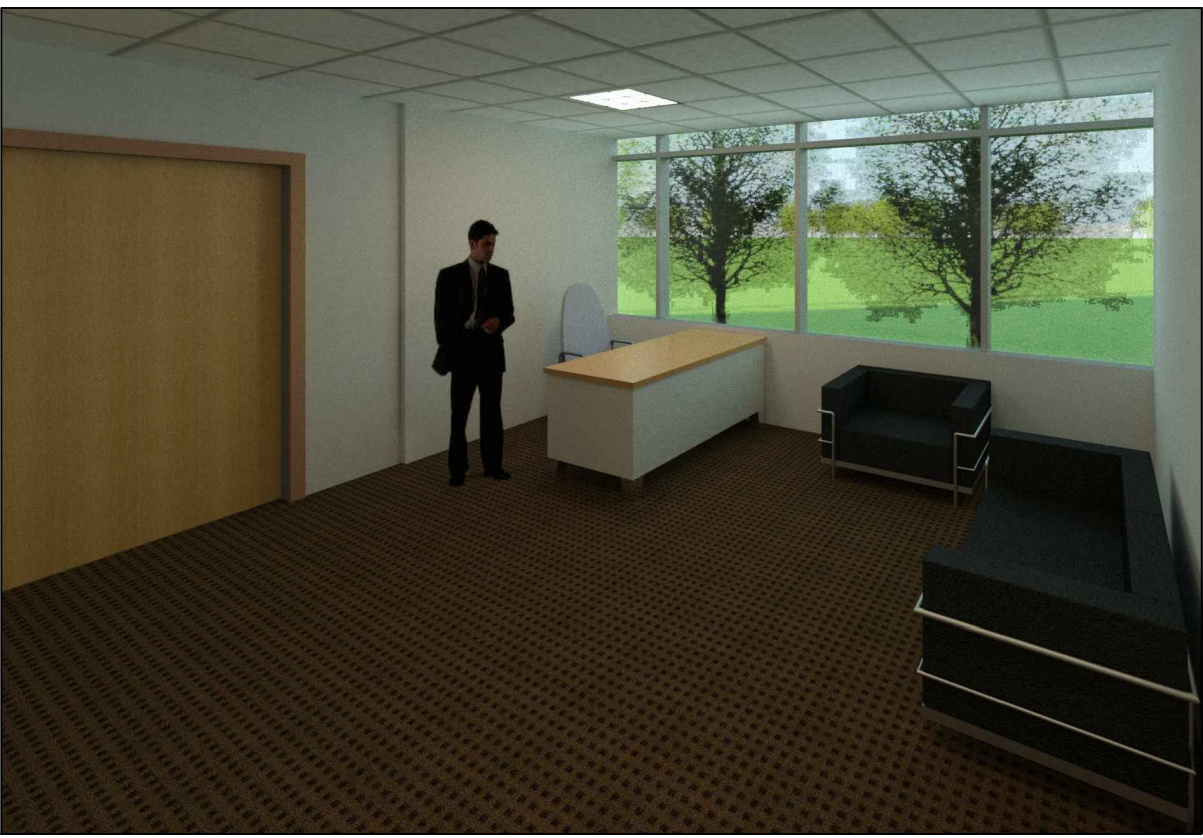
Project number 0001

Date 10/12/2020

Drawn by

Checked by

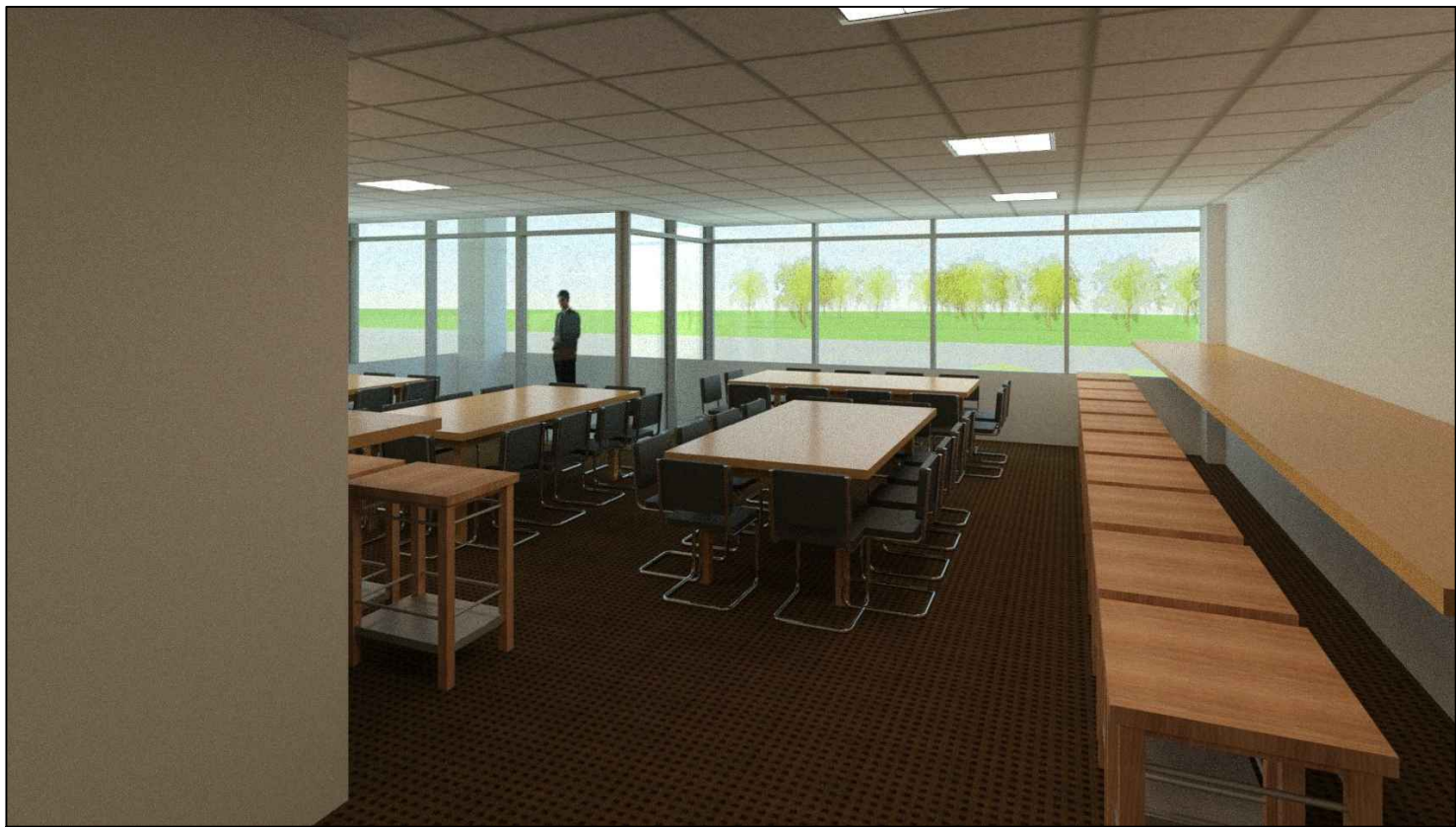
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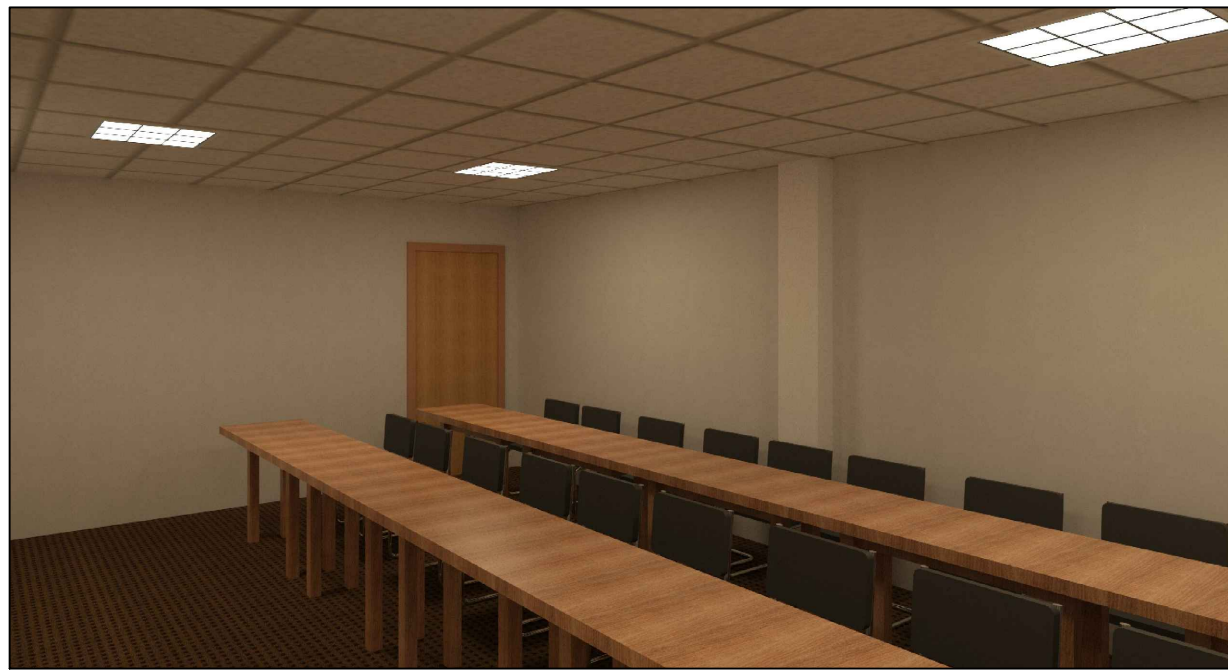
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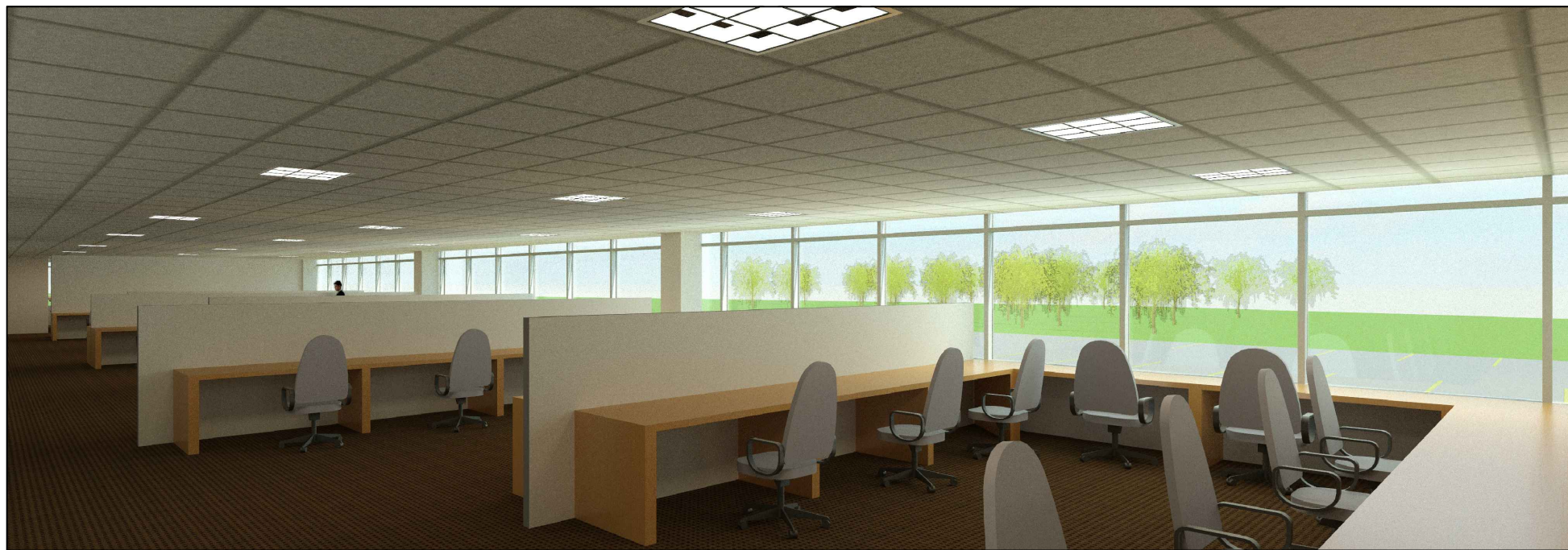
S.U.M. — COCINA



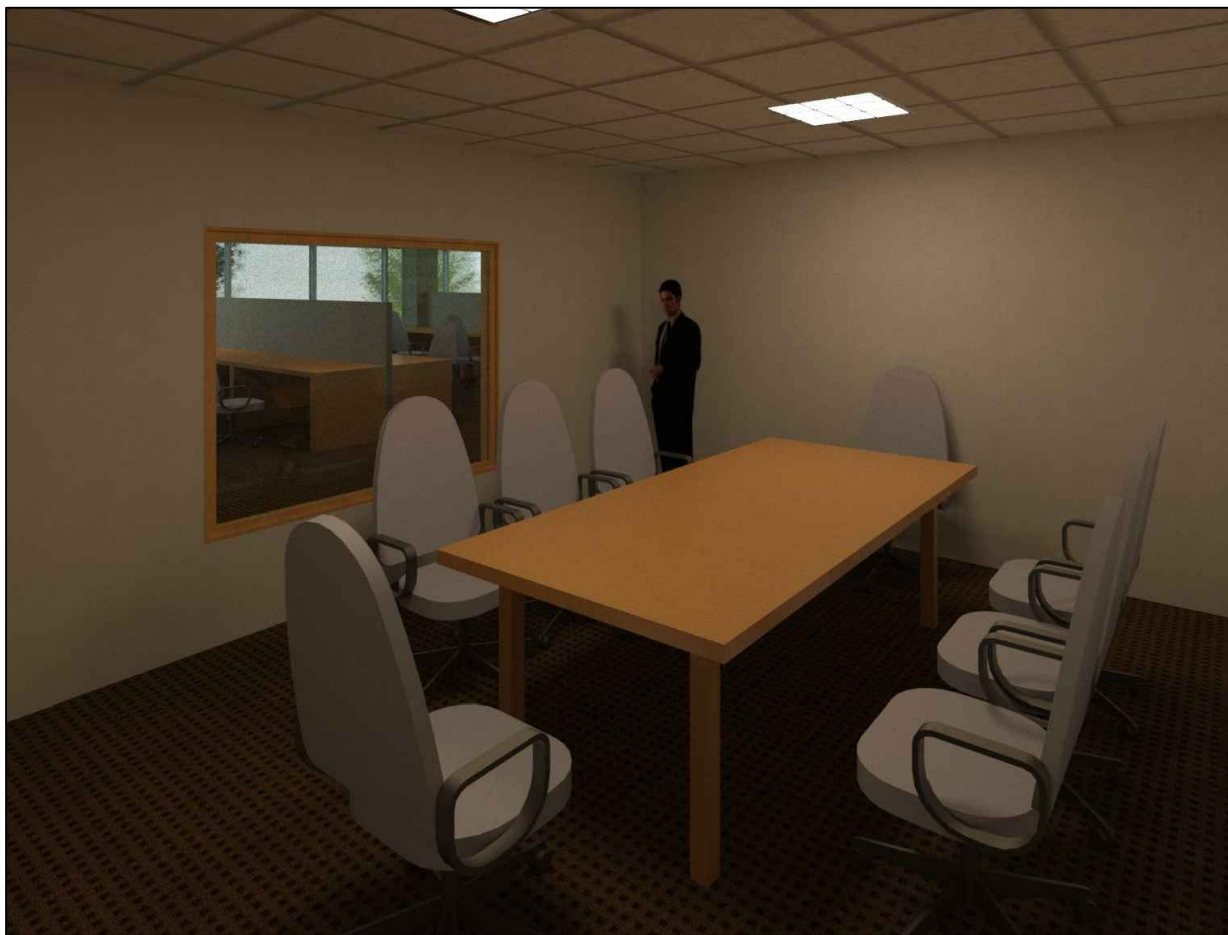
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SALA DE CAPACITACIÓN



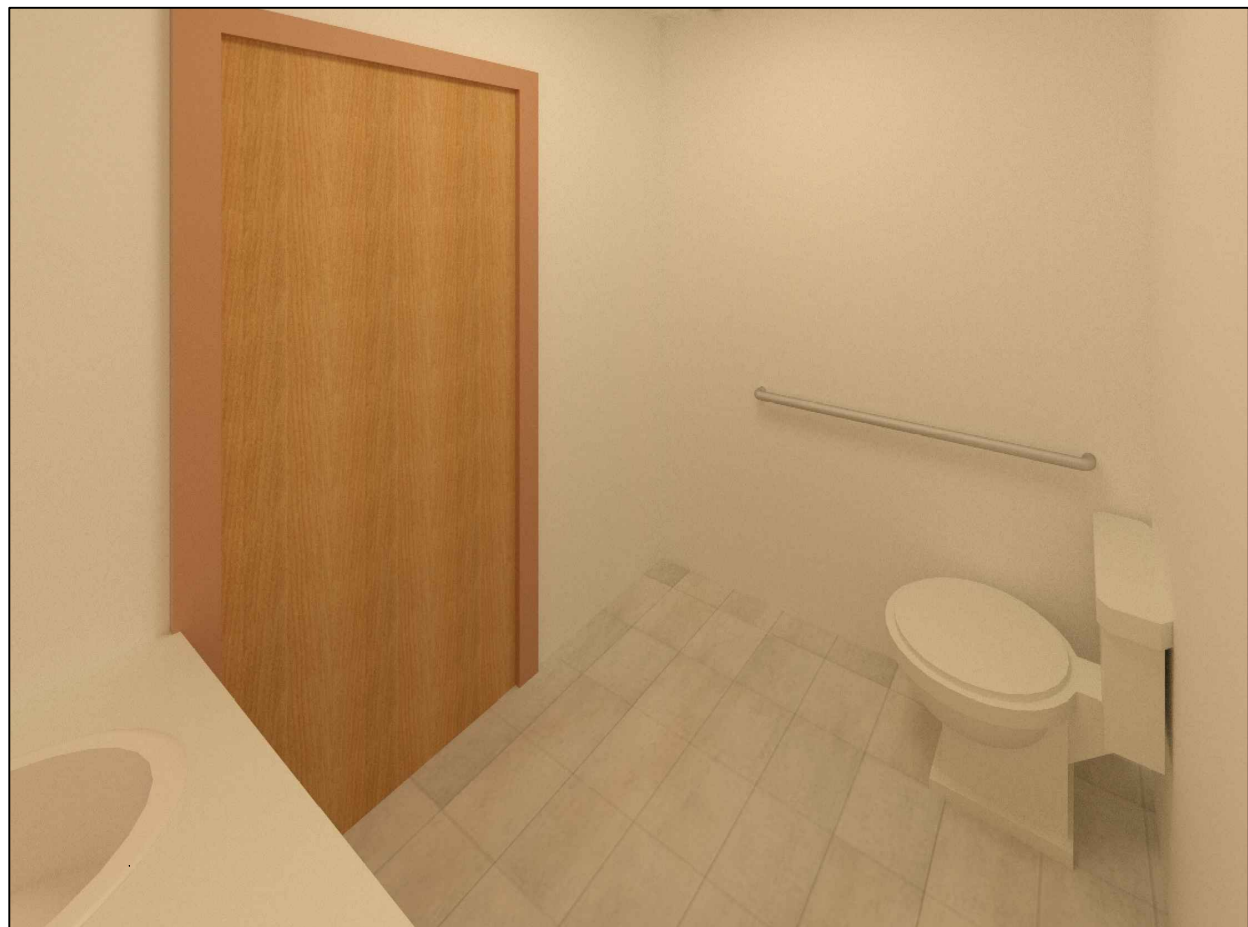
NÚCLEOS INTERMEDIOS DE OFICINAS



SALA DE REUNIONES



NÚCLEOS DE OFICINAS



BAÑO PARA DISCAPACITADOS



BAÑOS DE HOMBRES

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Trabajo Final:
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Renders interiores

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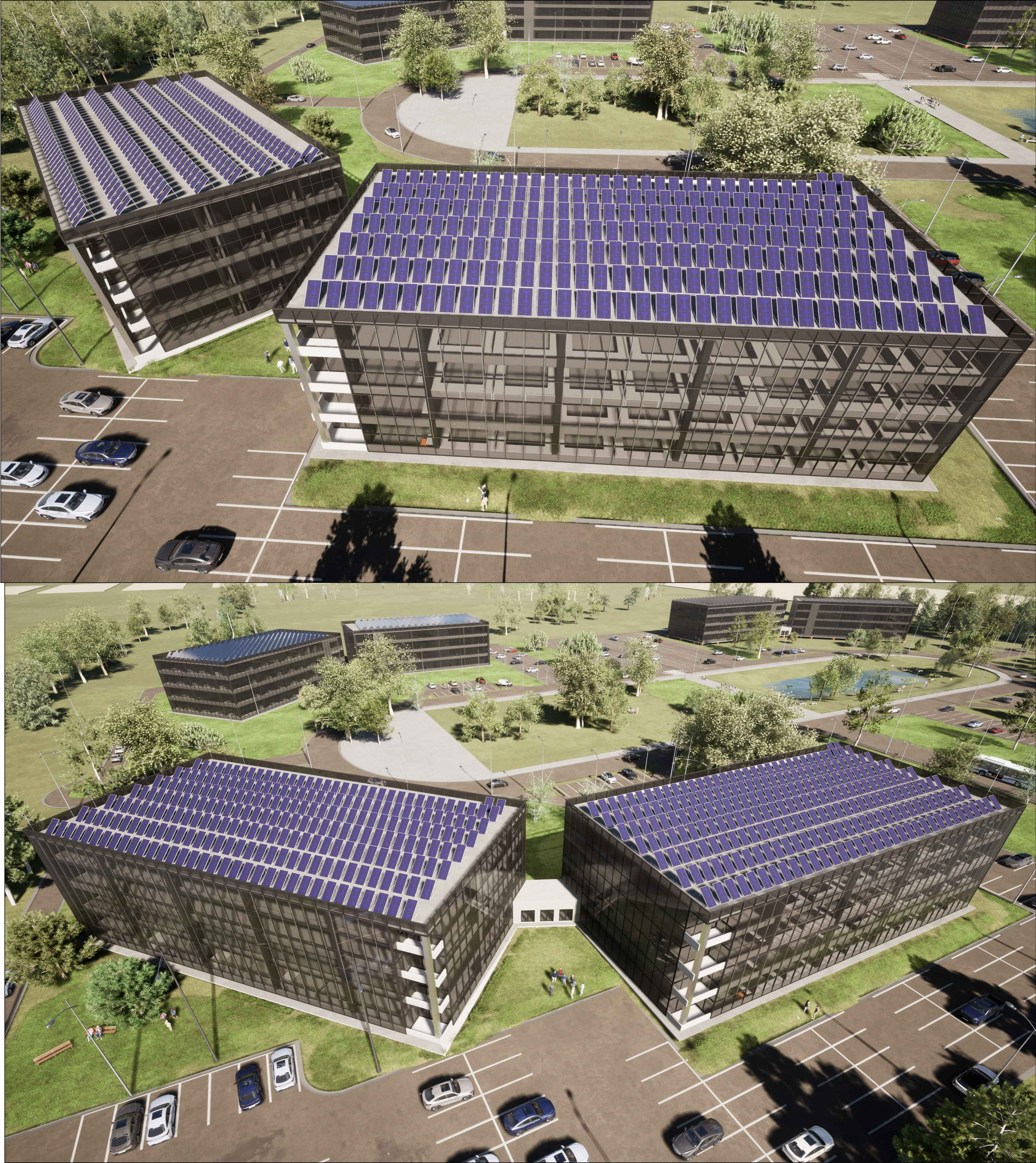
Date 10/12/2020

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A114

Scale



Autores

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Tutores

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-Ing. Facundo Ganancias

Trabajo Final:
Polo-
Tecnologico,
Sustentabilidad

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Catolica de
Cordoba

Cubiertas con
Paneles Solares

Project number 0001

Date 10/12/2020

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A115

Scale

ANEXO 200
DISEÑO ESTRUCTURAL

Autores

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-Alejandra Roggio

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-Ing. Marcos Fontana

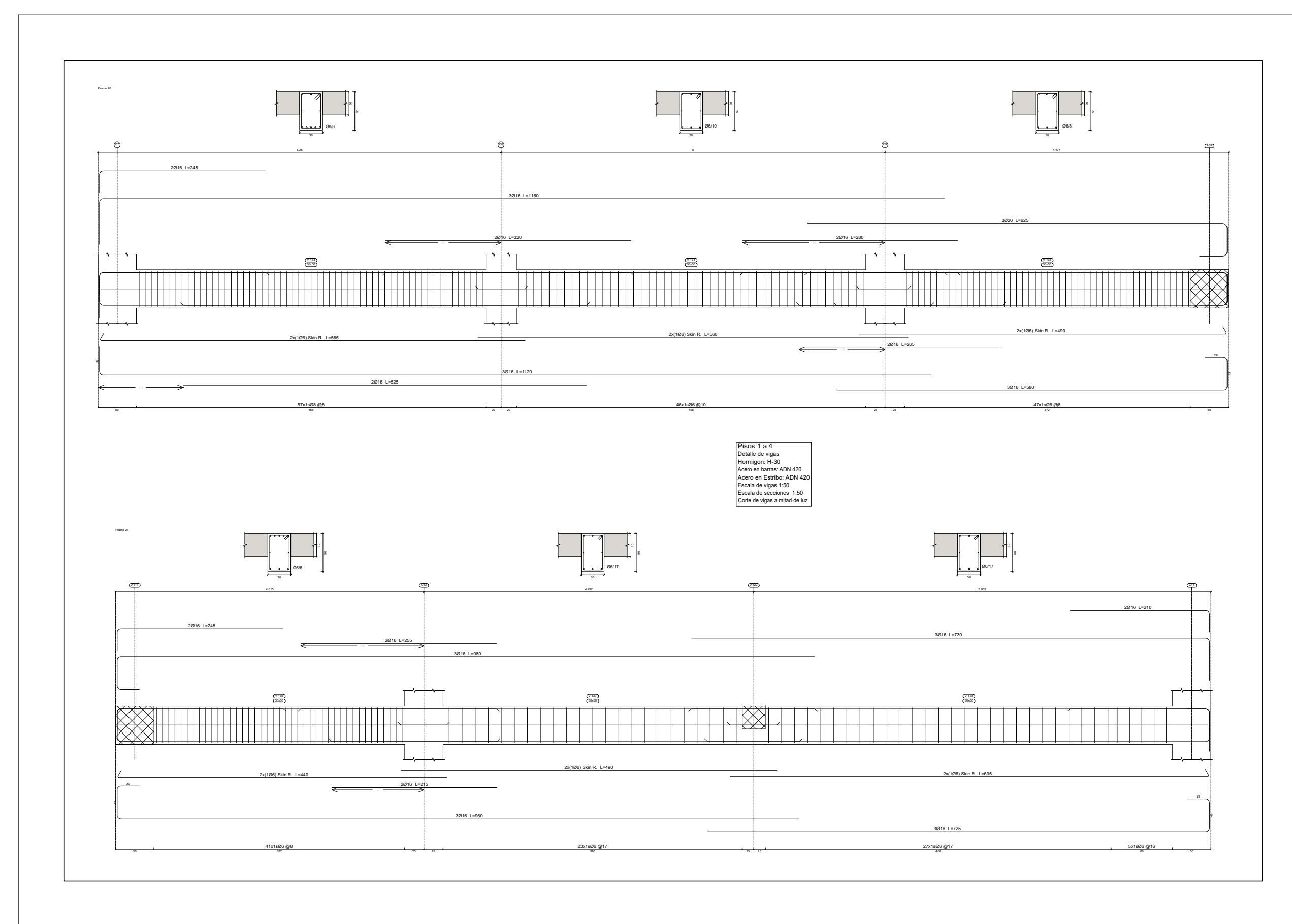
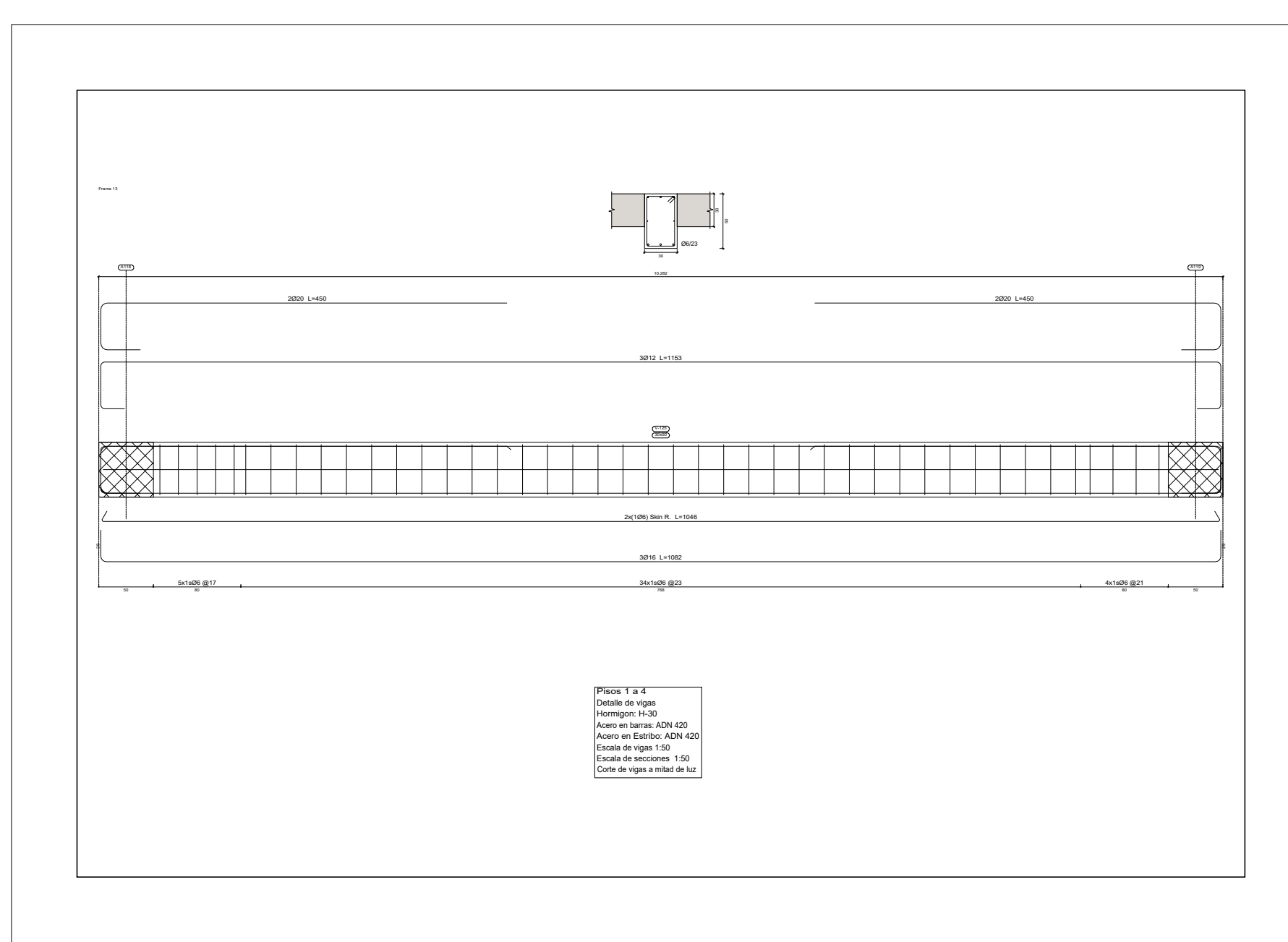
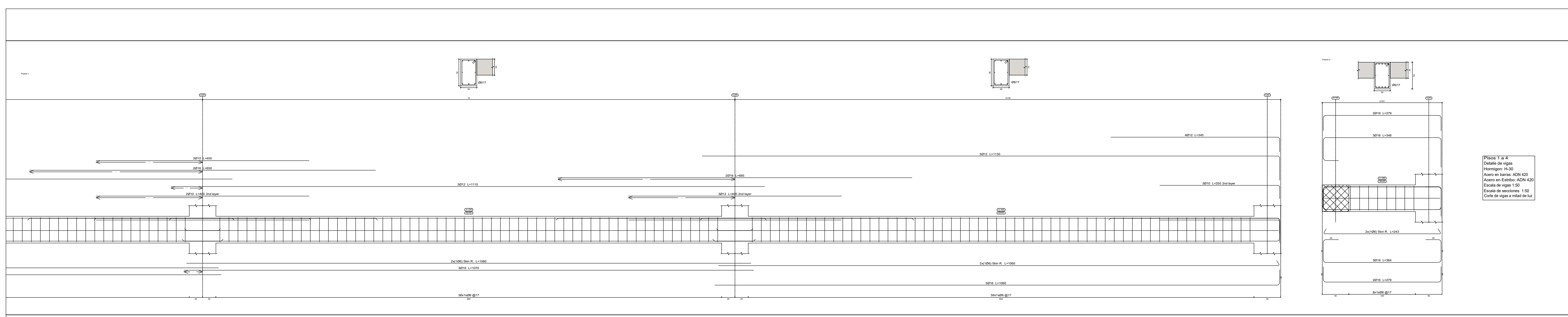
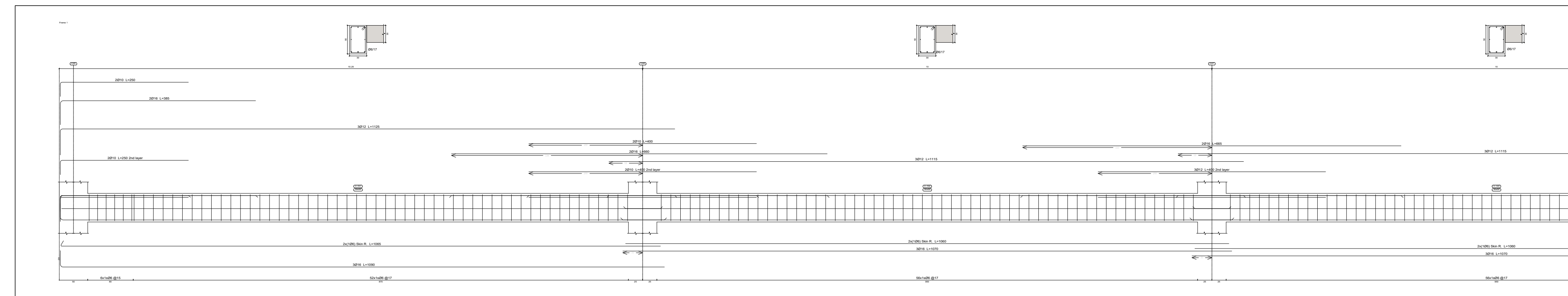
-Ing. Facundo Ganancias

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Master Plan

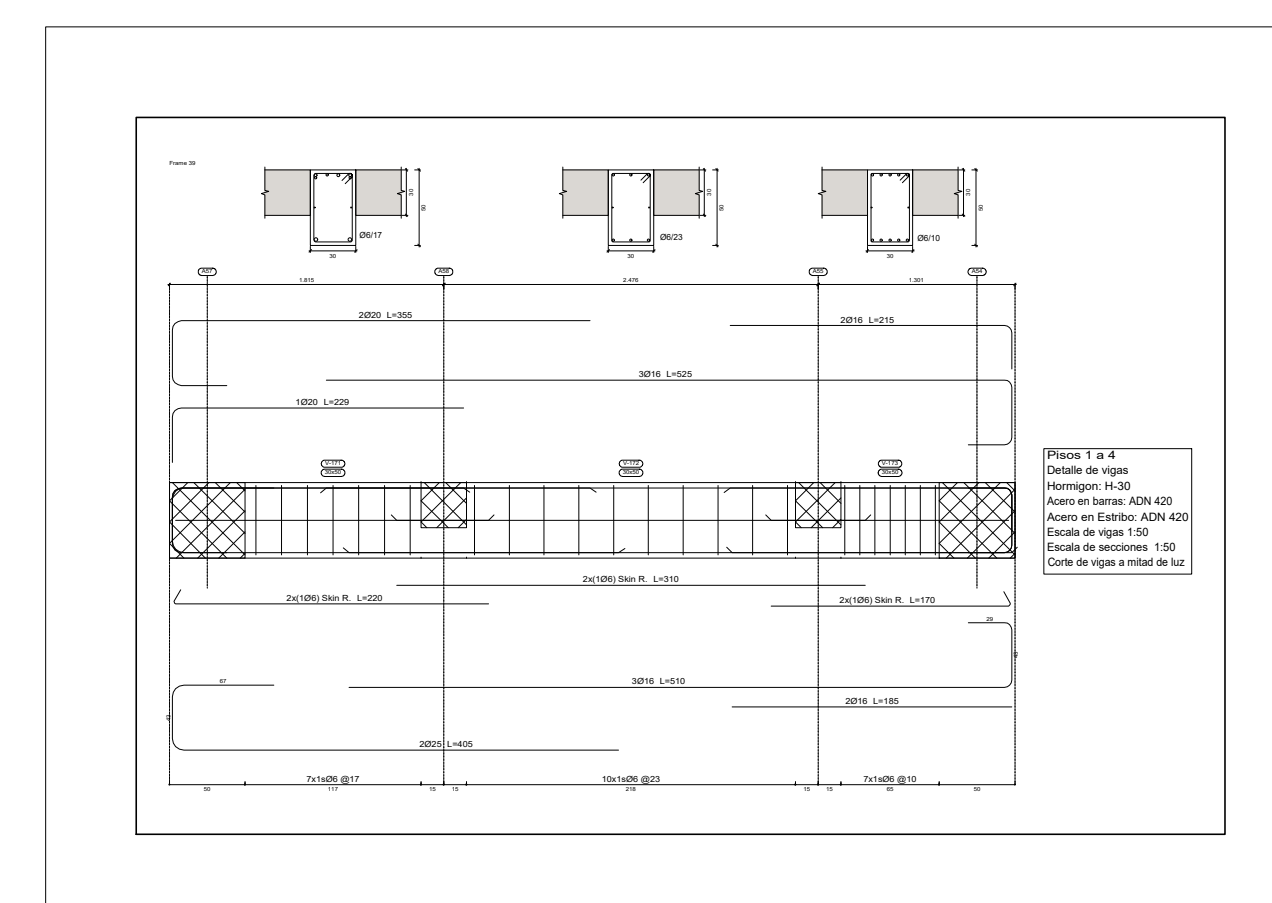
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Cordoba

Cuadro de Vigas

Project number	0001
Date	25/11/2020
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A201	
Scale	1 : 50



Scale 1 : 50



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Trabajo Final:
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Tecnologico,
Master Plan

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Catolica de
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Cuadro de Vigas

Project number 0001

Date 25/11/2020

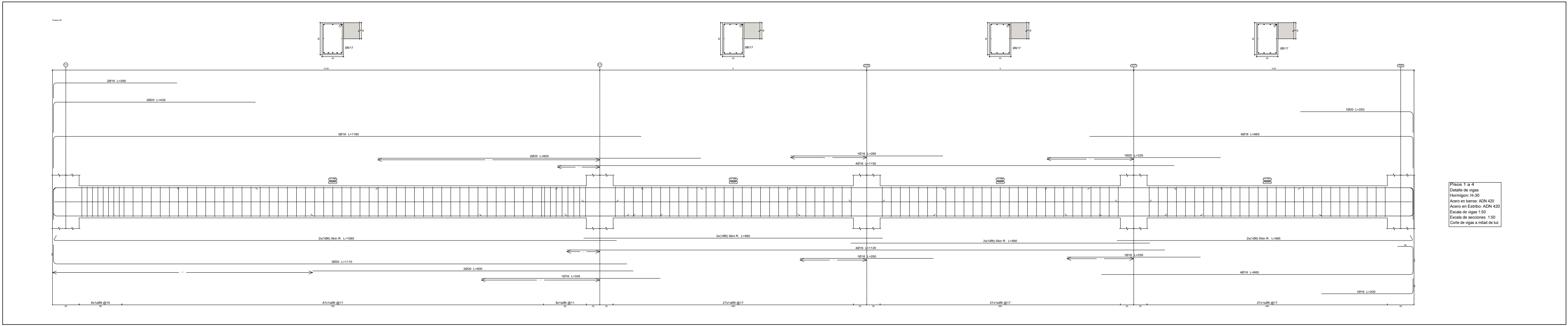
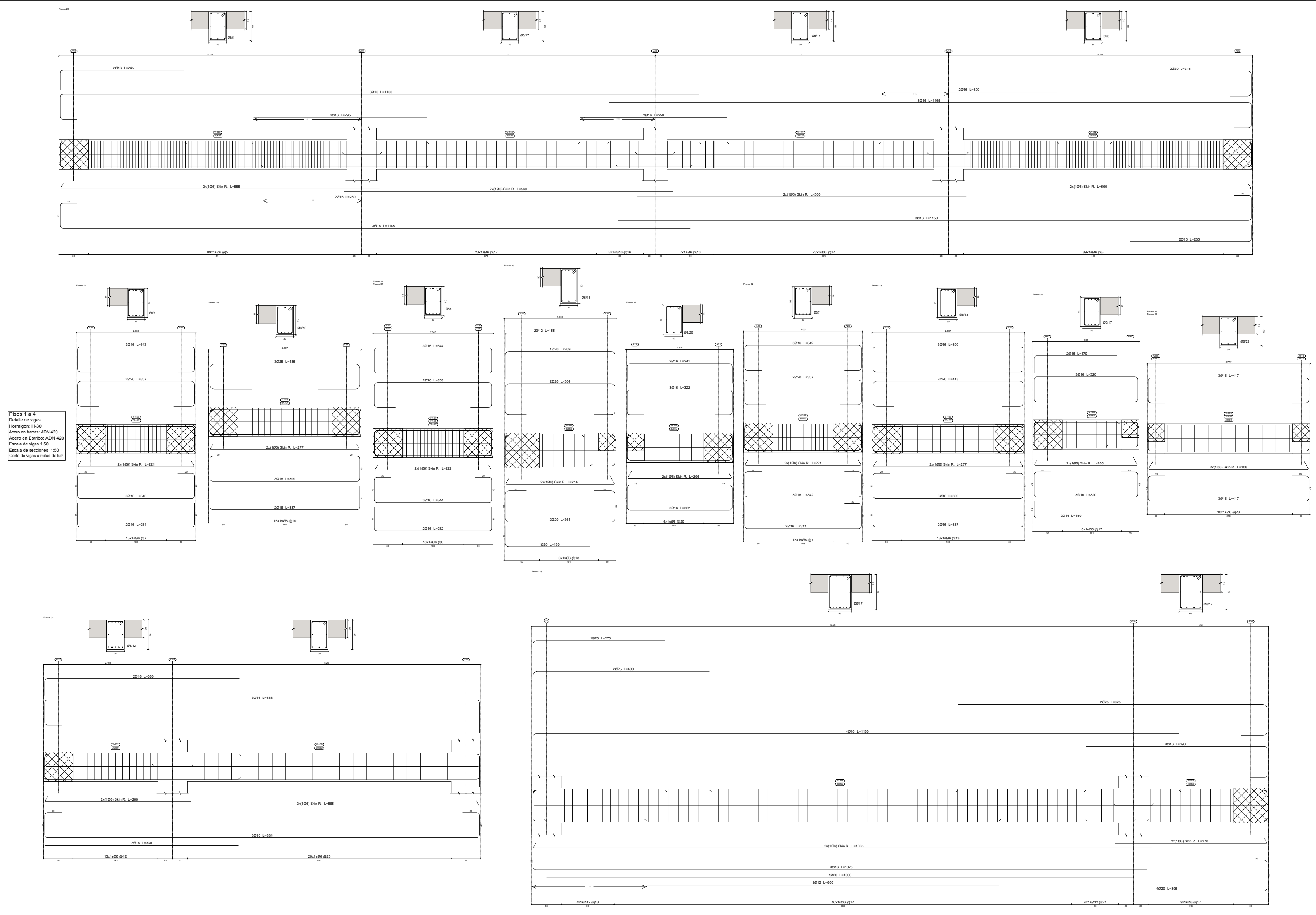
Drawn by

Checked by

A203

Scale 1 : 50

FIGURA T-4
Corte de vigas
Herramienta: A203
Autores: Daniela Castagnola, Benjamin Noya, Alejandra Roggio
Escala: 1:50
Corte de vigas a nivel de fachada



Autores
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-Benjamin Noya

-Alejandra Roggio

Tutores
-Ing. Marcos Fontana
-Ing. Facundo Ganancias

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Polo-
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Cuadro de Vigas

Project number 0001

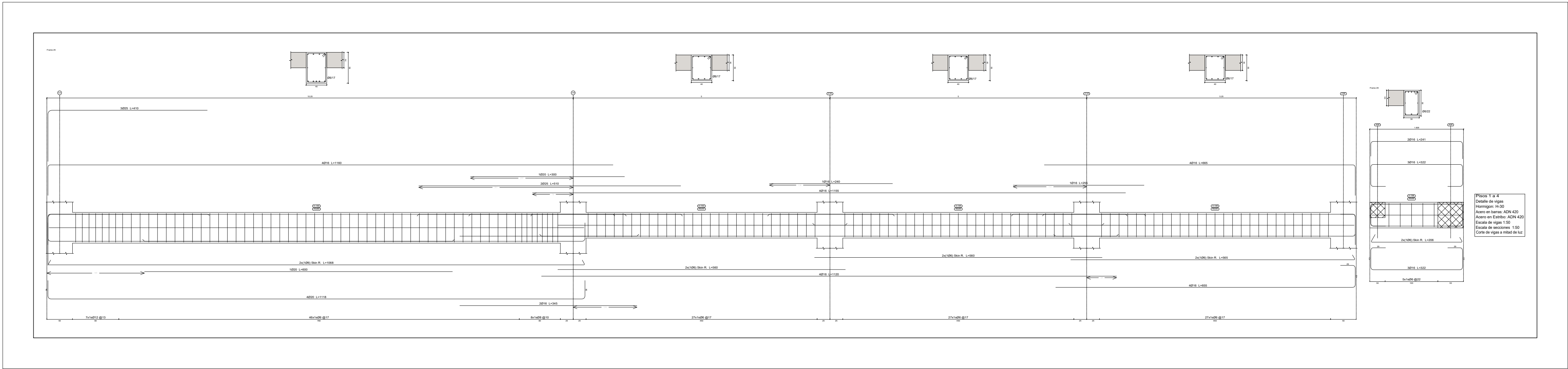
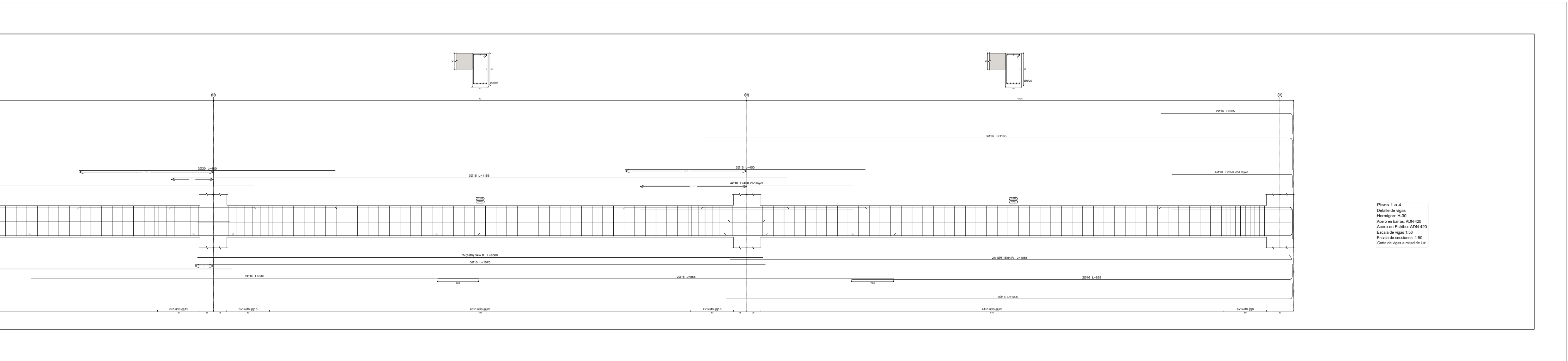
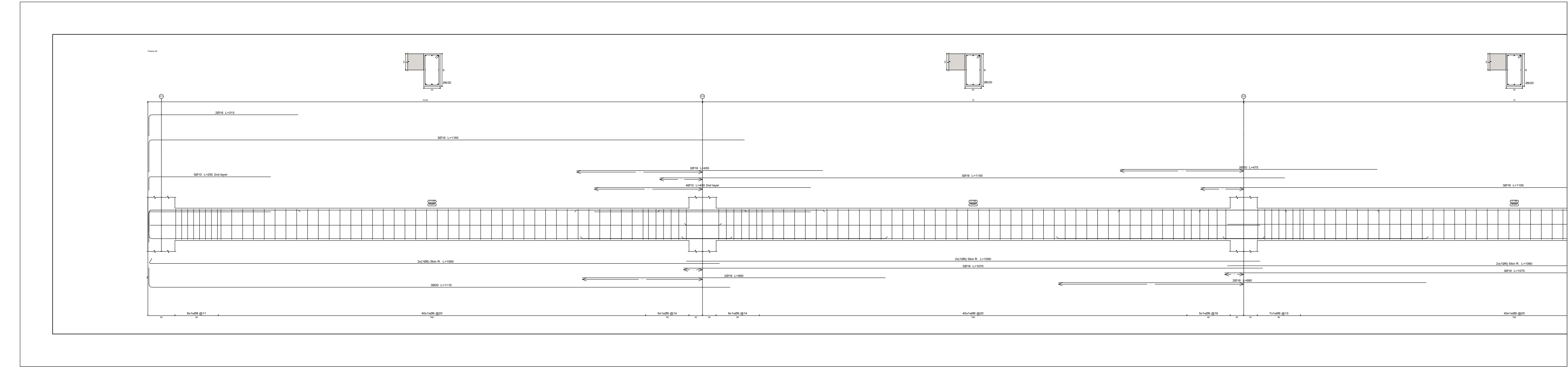
Date 25/11/2020

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A204

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Tutores

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-Ing. Facundo Ganancias

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Cuadro de Vigas

Project number	0001
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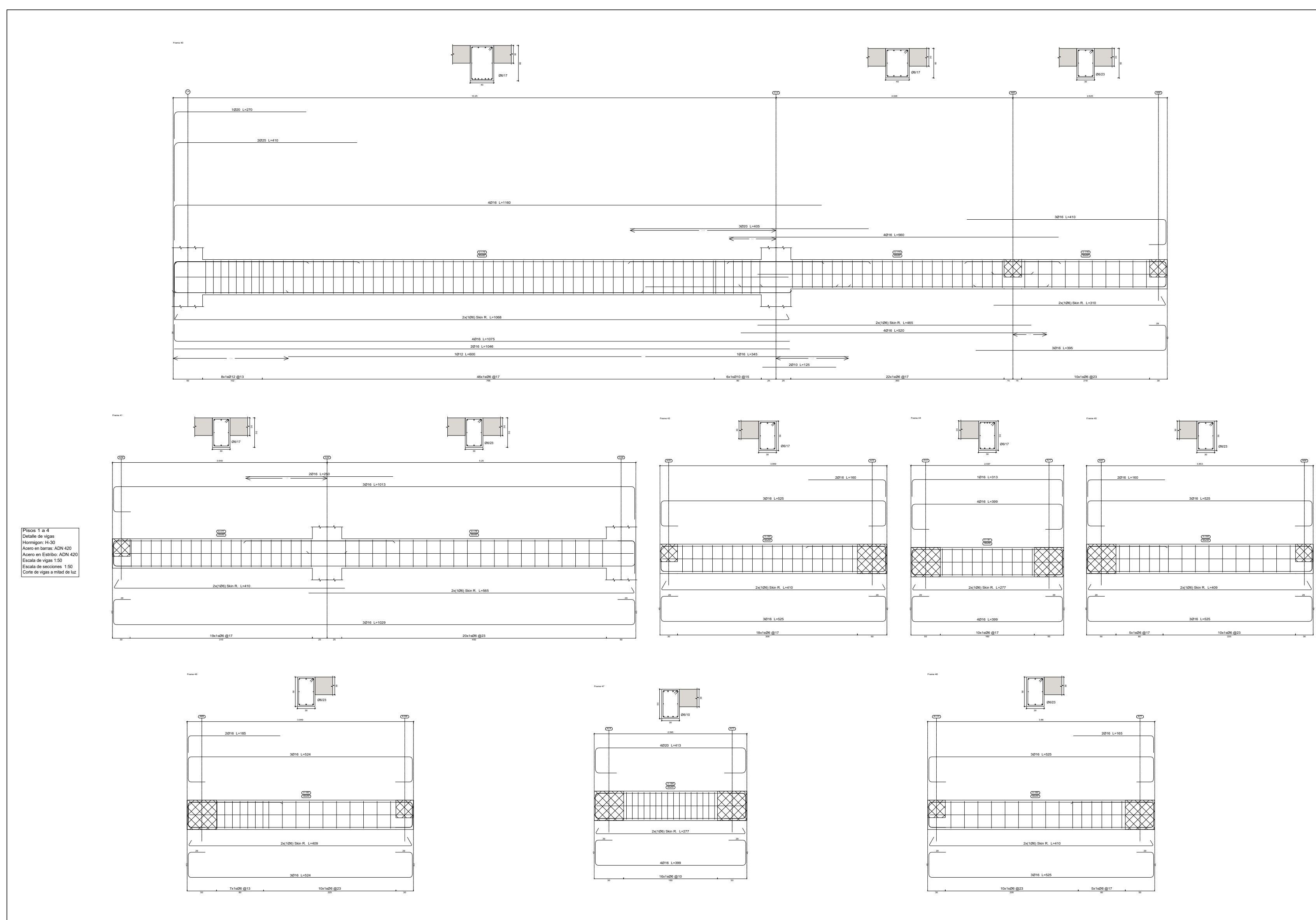
Date	25/11/2020
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Drawn by

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A205

Scale	1 : 50
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Autores

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-Benjamin Noya

-Alejandra Roggio

Tutores

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-Ing. Facundo Ganancias

Trabajo Final: Polo- Tecnologico, Master Plan

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Cuadro de Vigas

Project number	0001
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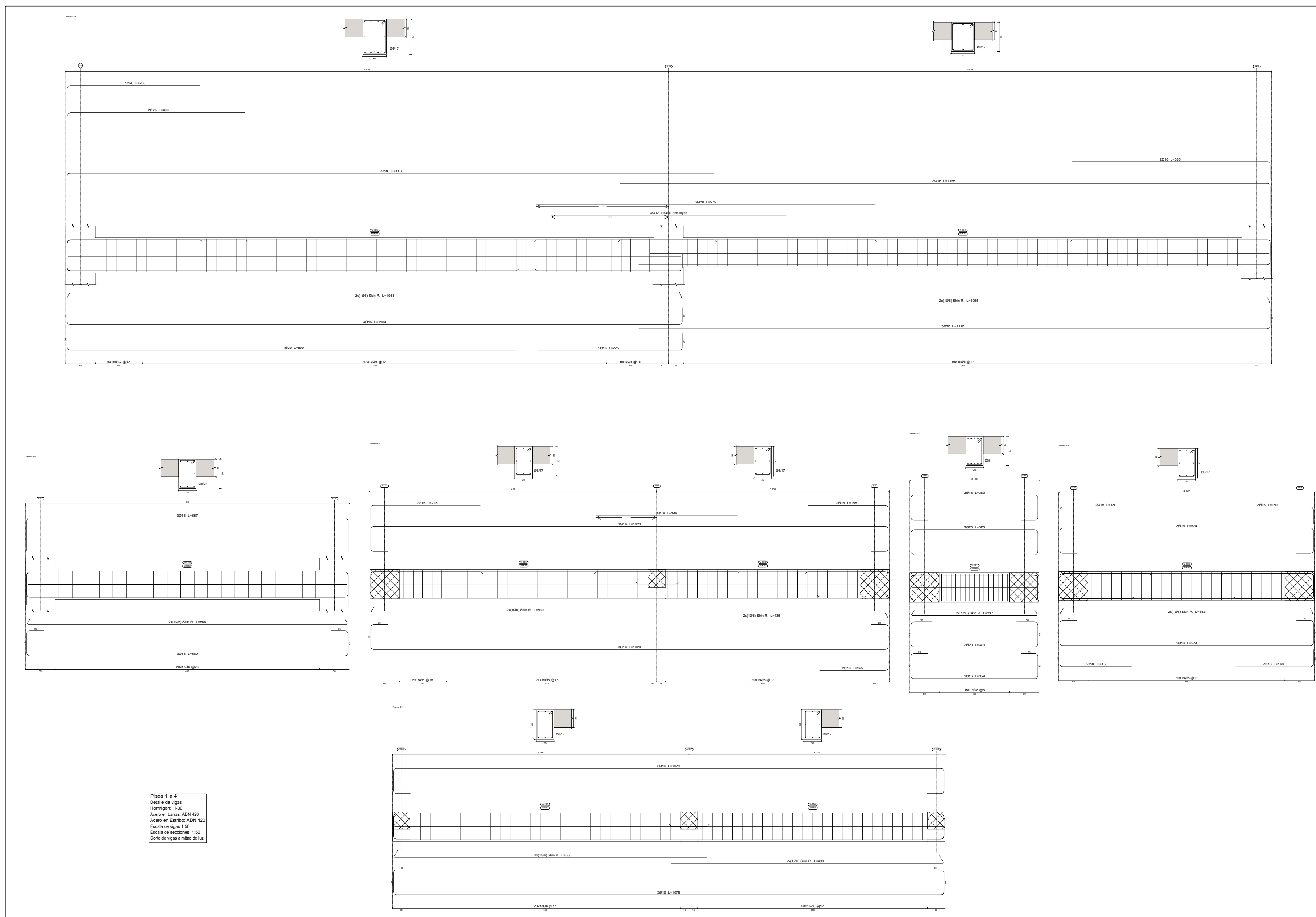
Date	25/11/2020
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A206

Scale	1 : 50
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-Alejandra Roggio

Tutores

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-Ing. Facundo Ganancias

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Cuadro de Vigas

Project number0001

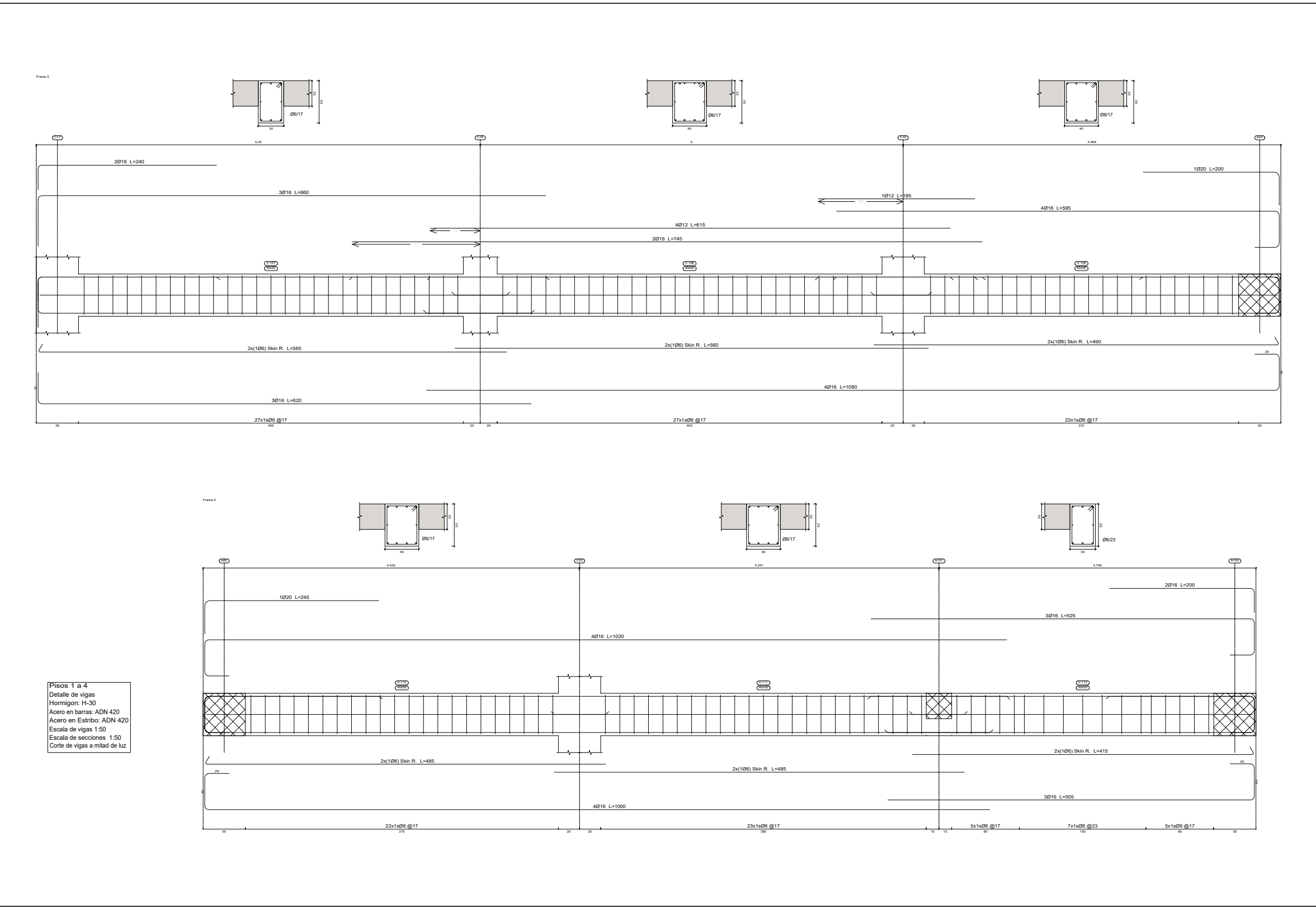
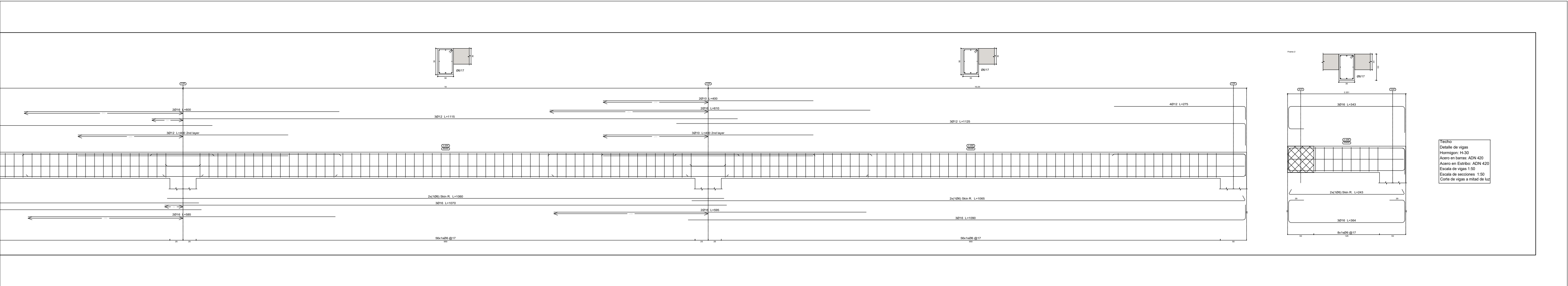
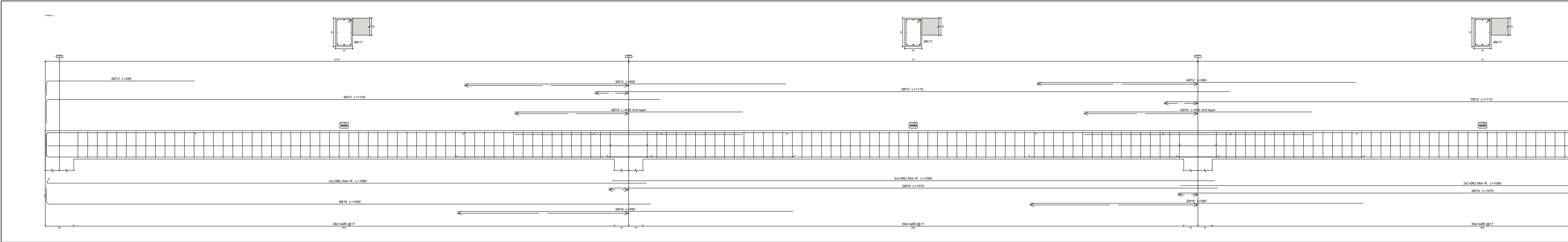
Date25/11/2020

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A207

Scale1 : 50



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Project number	0001
Date	25/11/2020
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A208	
Scale	1 : 50

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Project number	0001
Date	25/11/2020
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Checked by	
A209	
Scale	1 : 50

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Master Plan

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Project number 0001

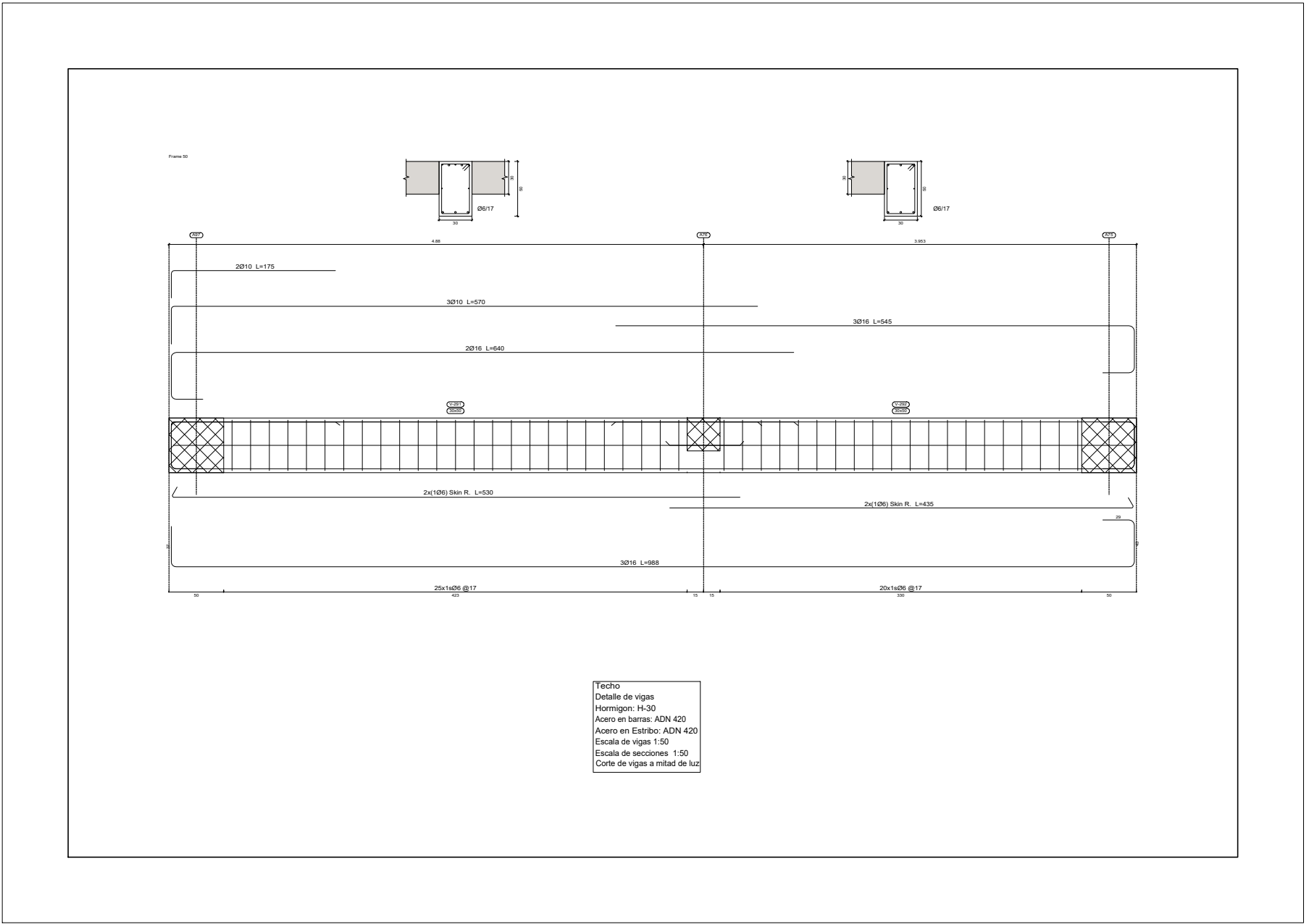
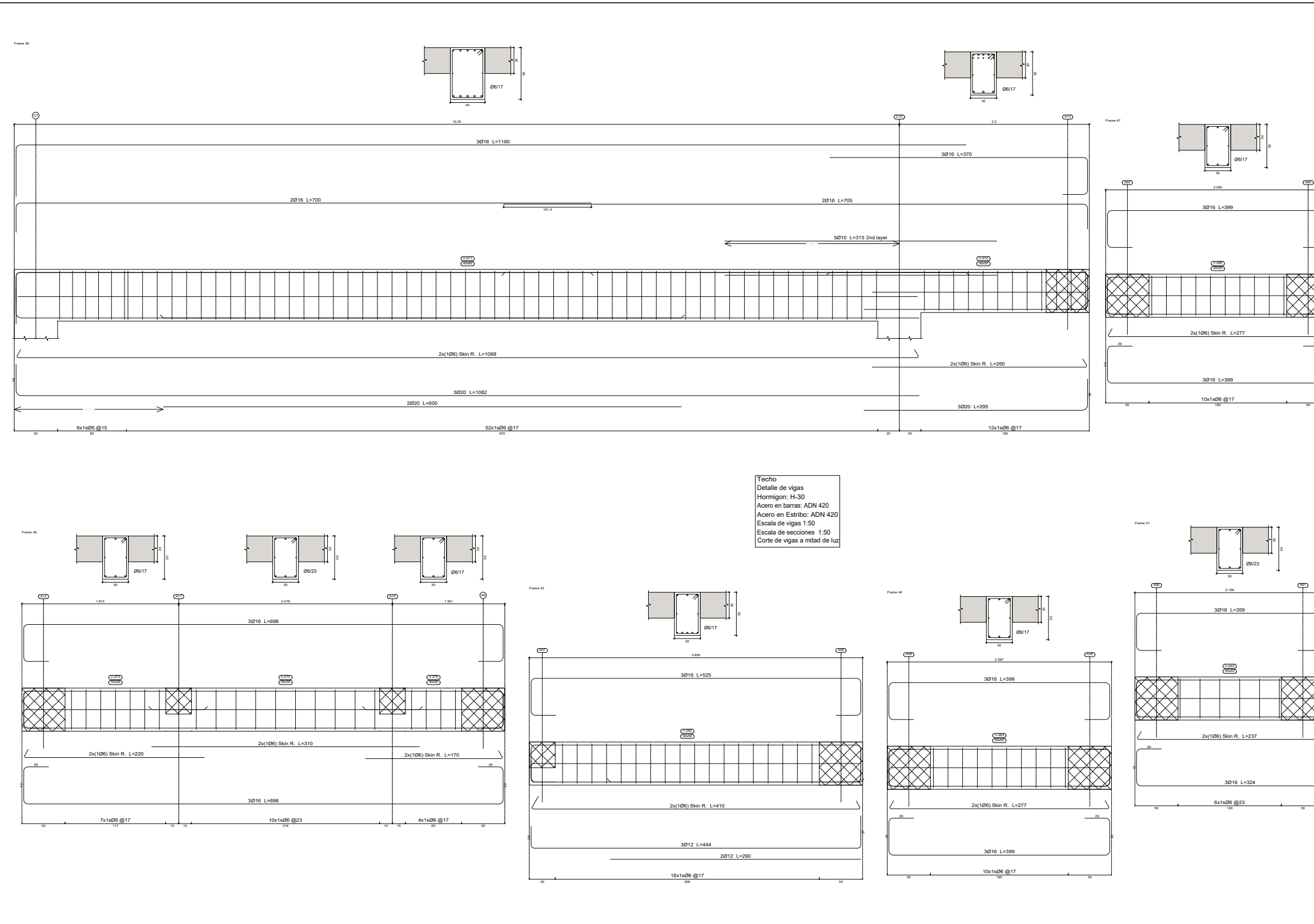
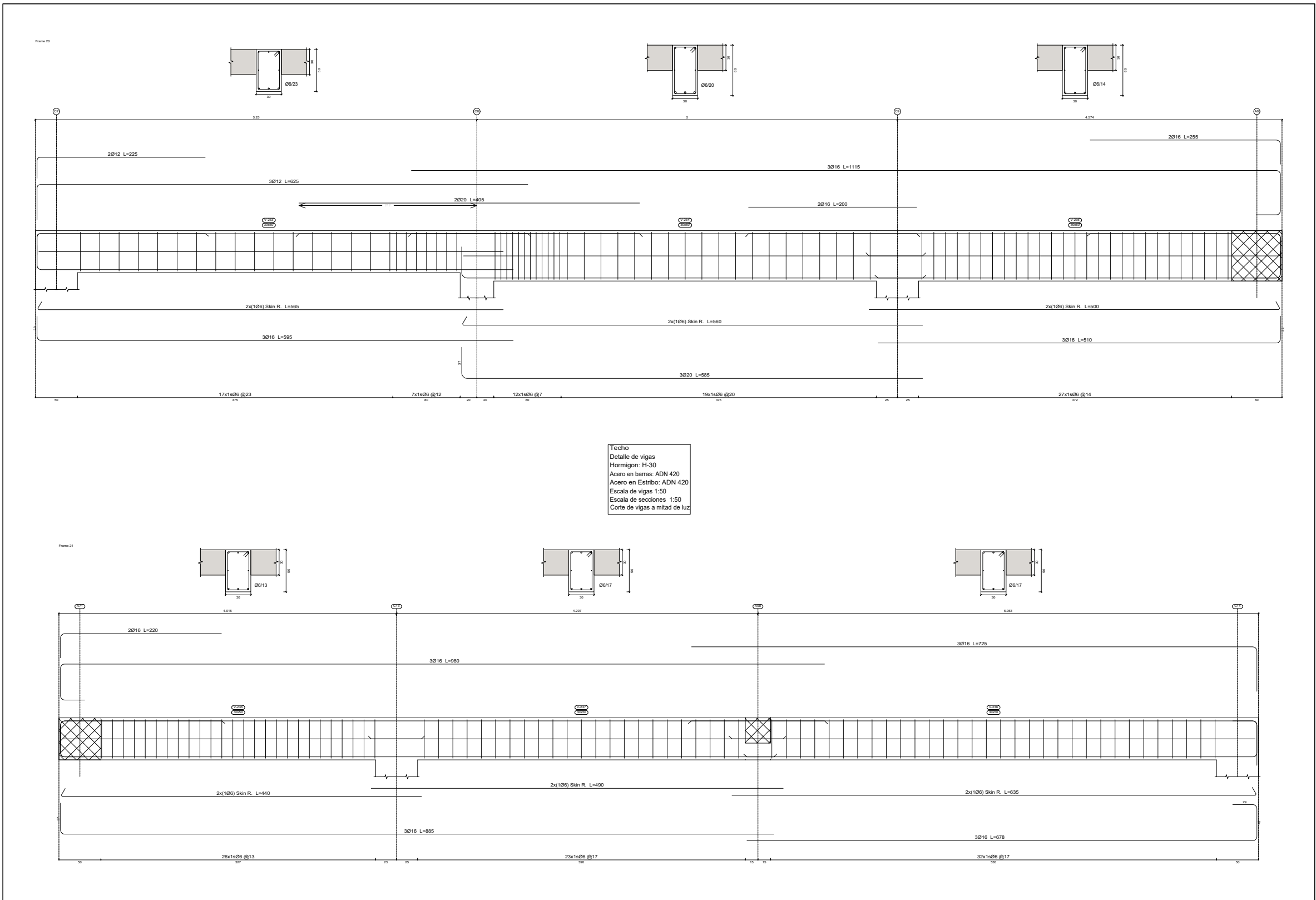
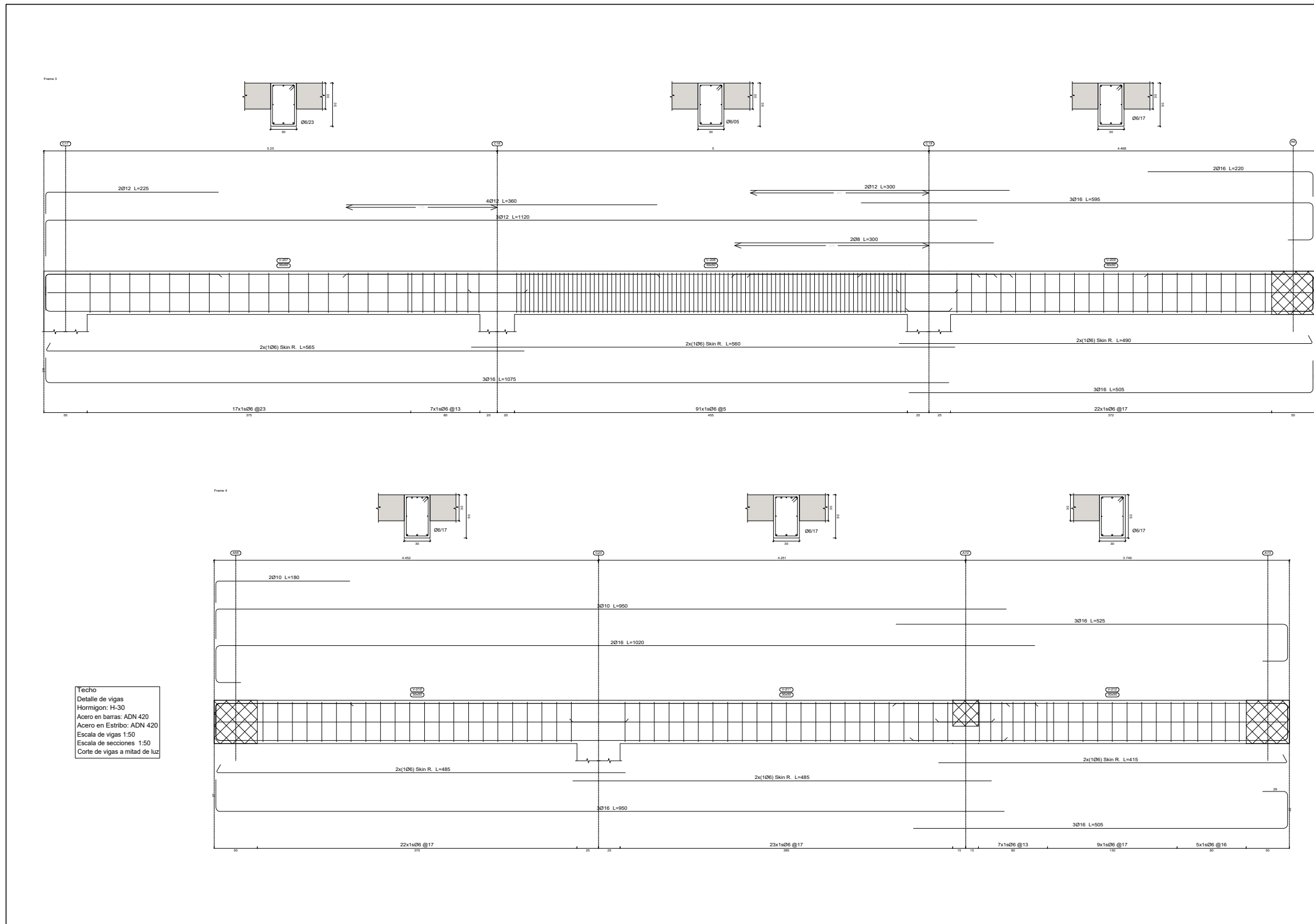
Date 25/11/2020

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A210

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Project number 0001

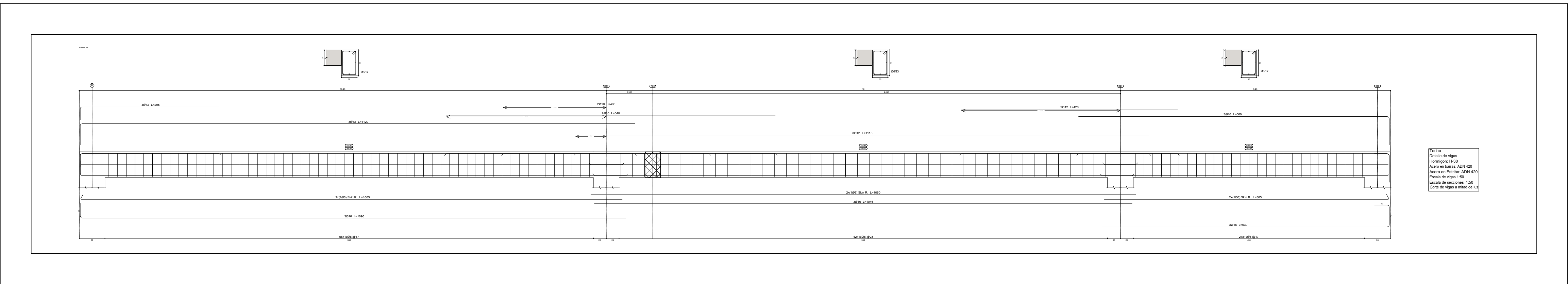
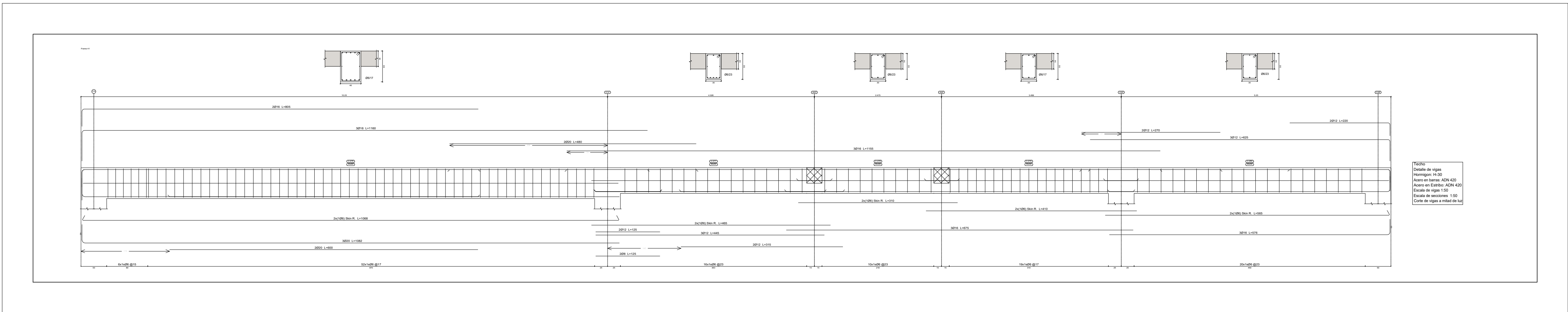
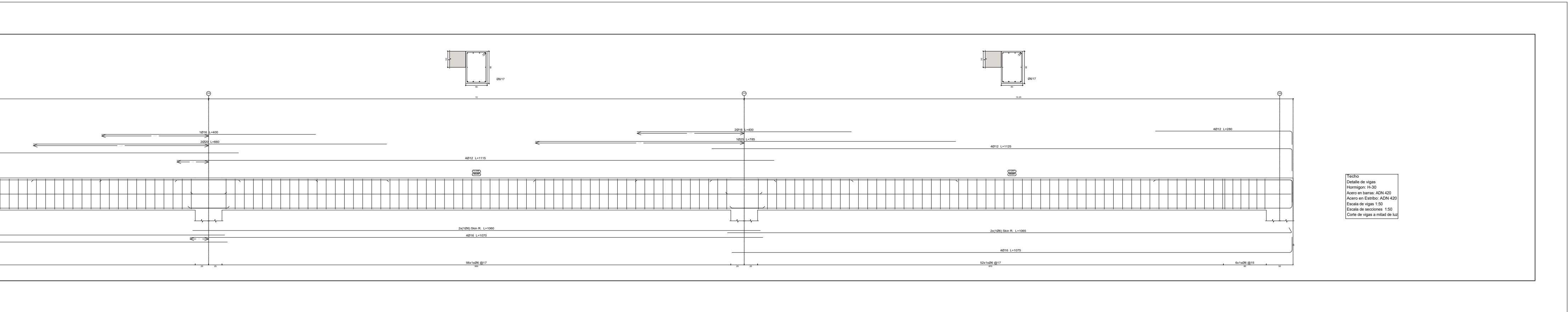
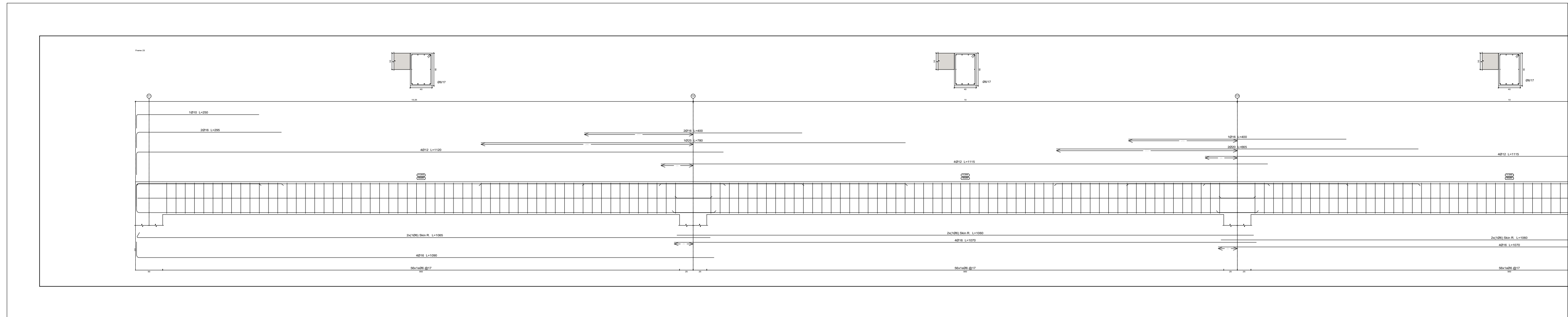
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A211

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Project number 0001

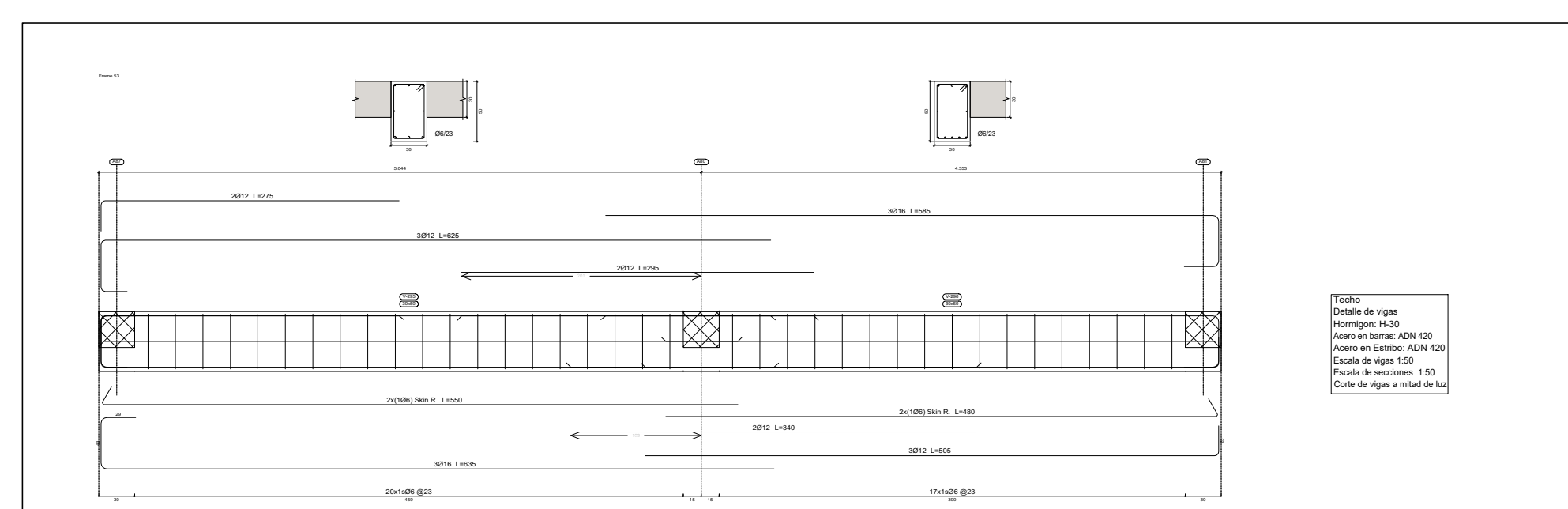
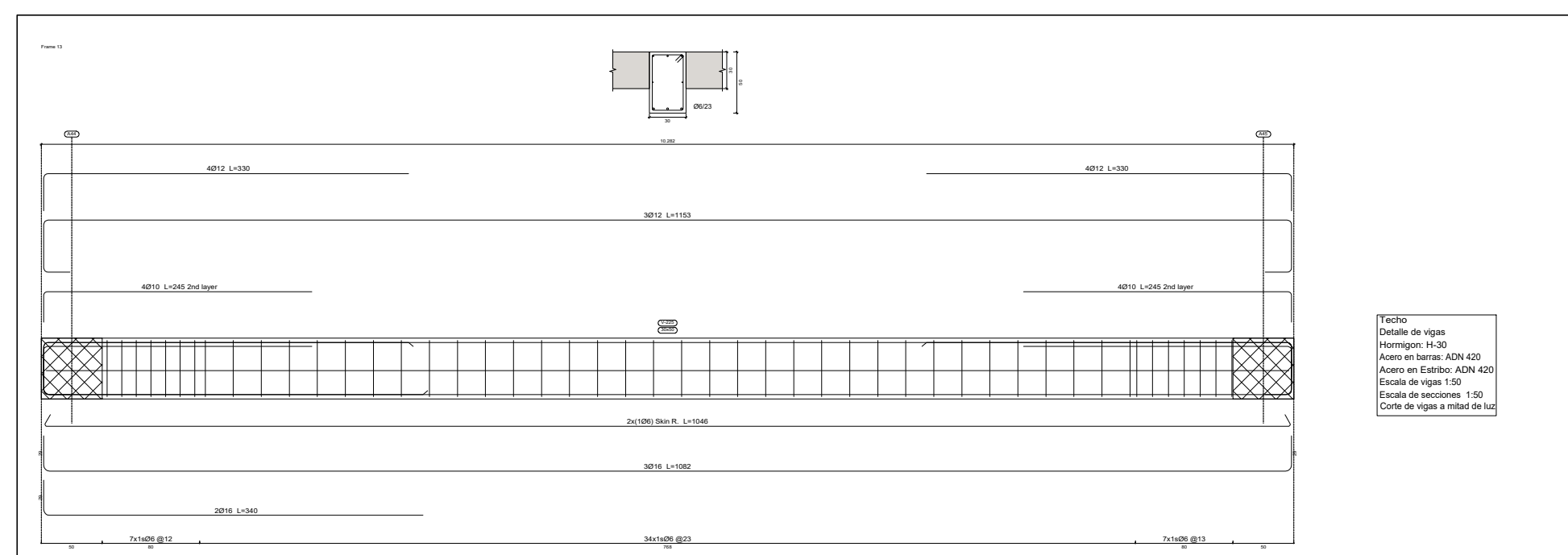
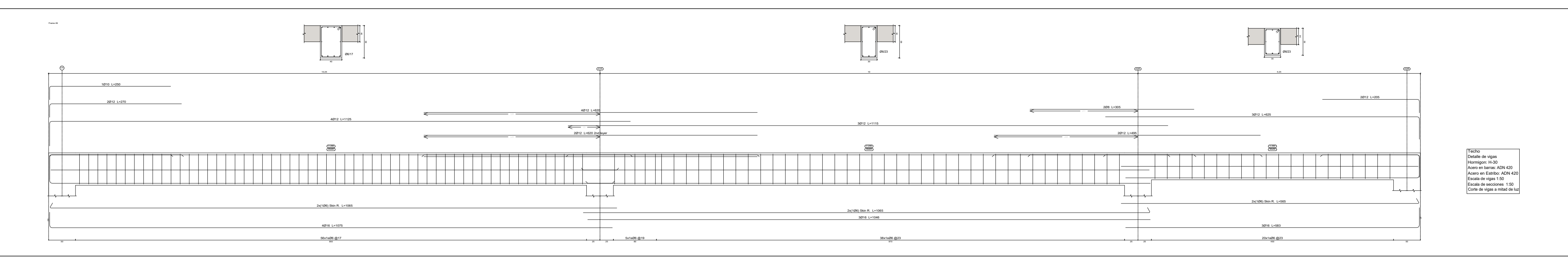
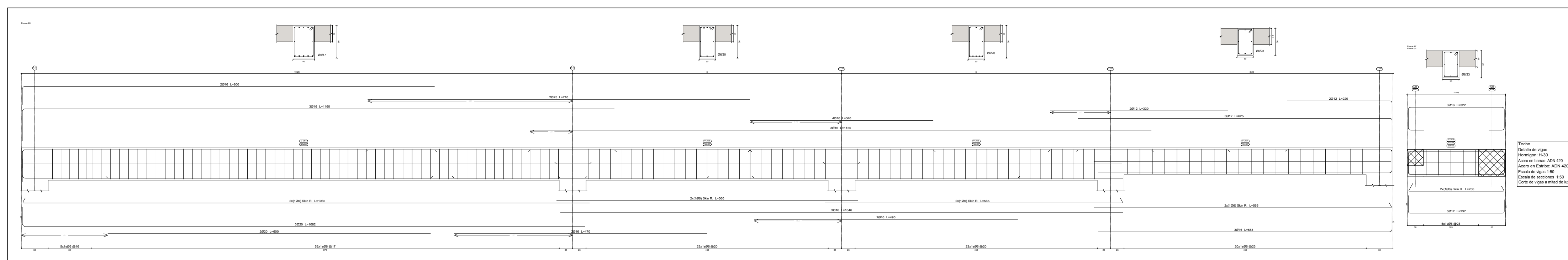
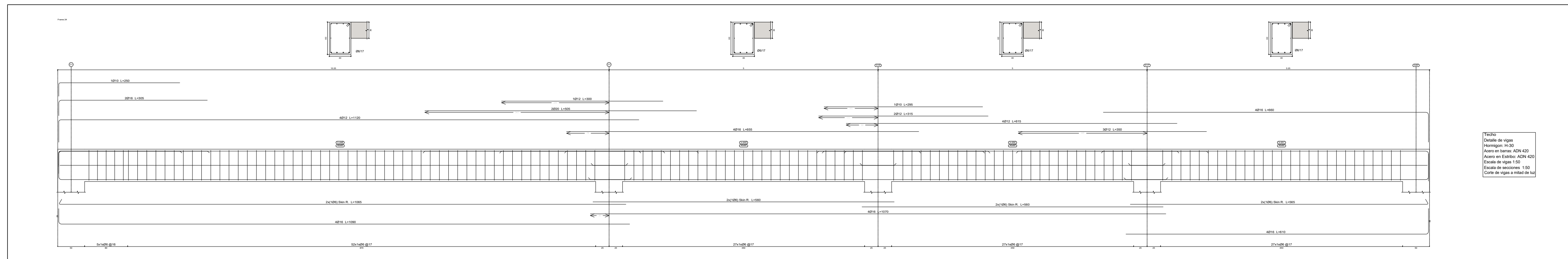
Date 25/11/2020

Drawn by

Checked by

A212

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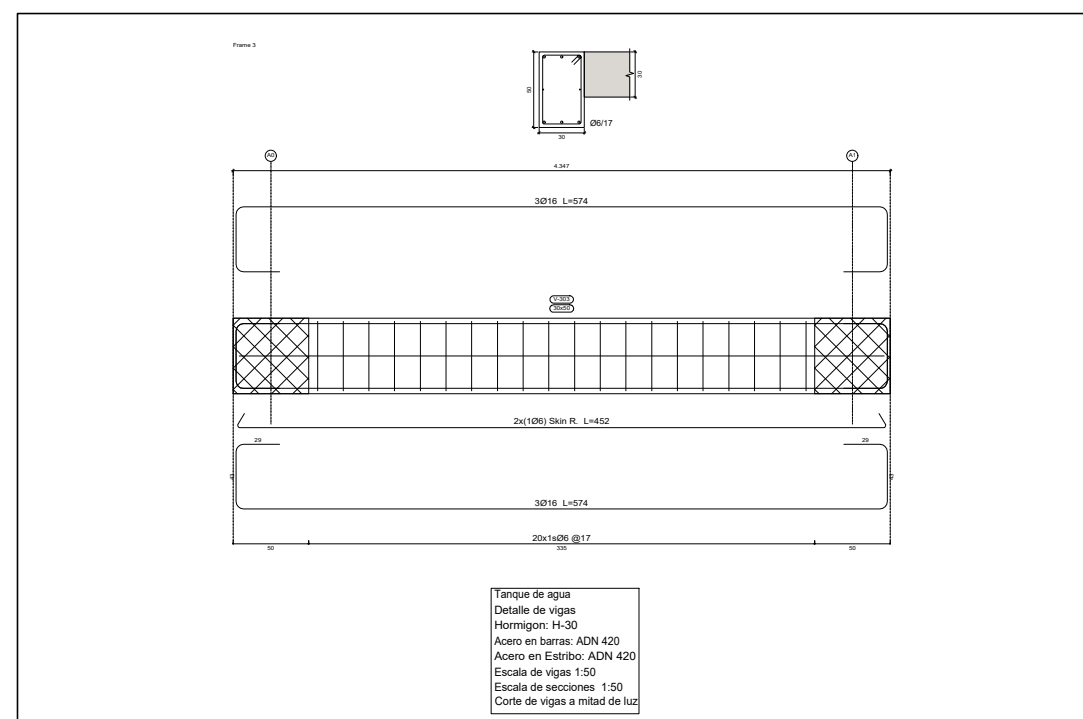
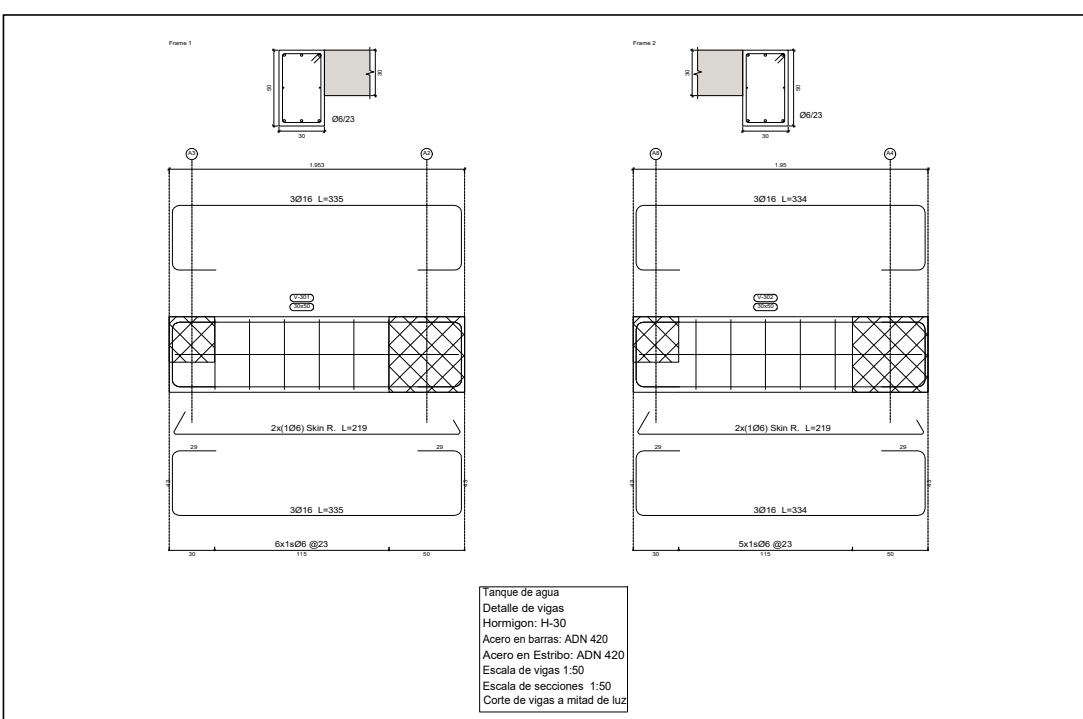
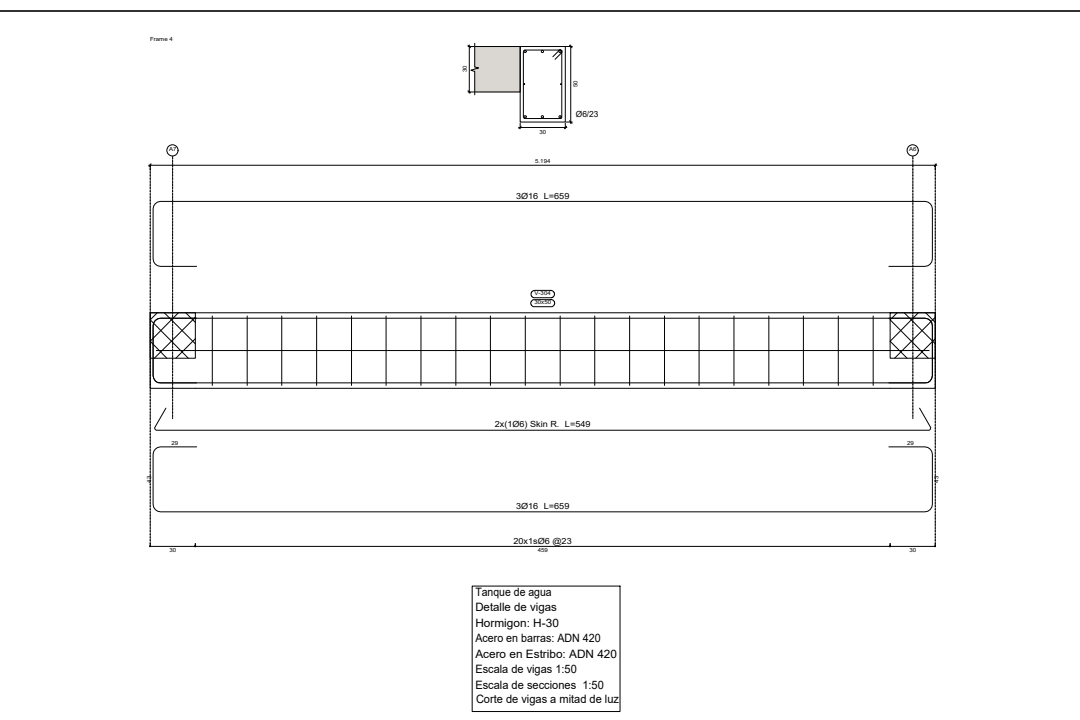
-Ing. Facundo Ganancias

Trabajo Final:
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Cuadro de Vigas

Project number	0001
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A213	
Scale	1 : 50



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Columna 1

Project number 0001

Date 21/10/2020

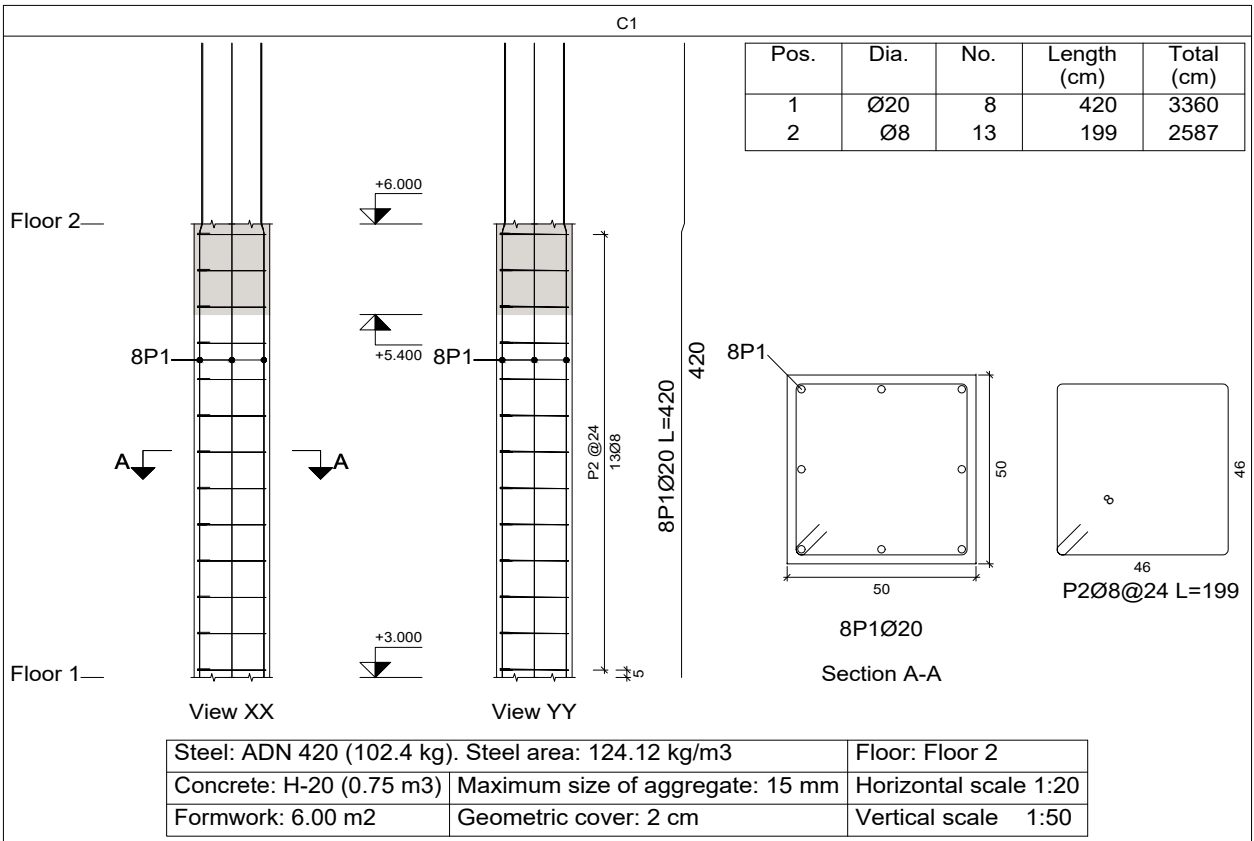
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A214

Scale 1 : 50

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C1	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	8 46	199	2587	10.2
					Total+10%	102.4	



Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

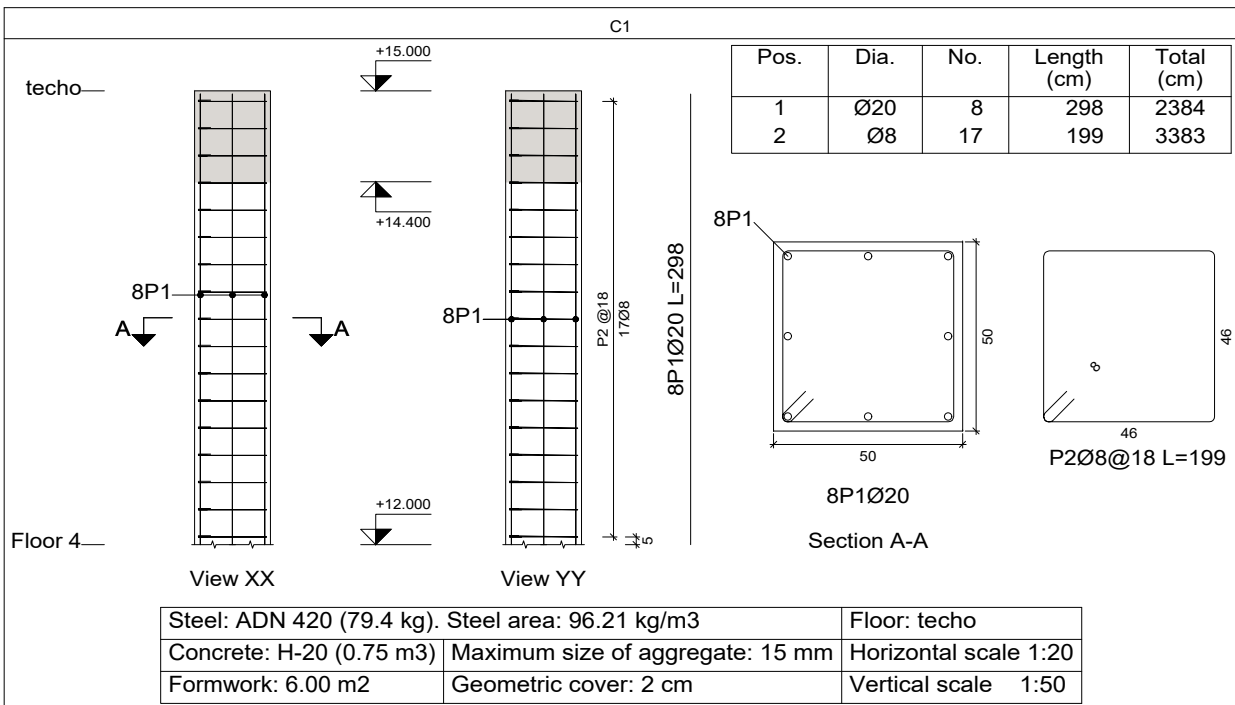
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C1	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	8 46	199	2587	10.2
					Total+10%	102.4	

Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

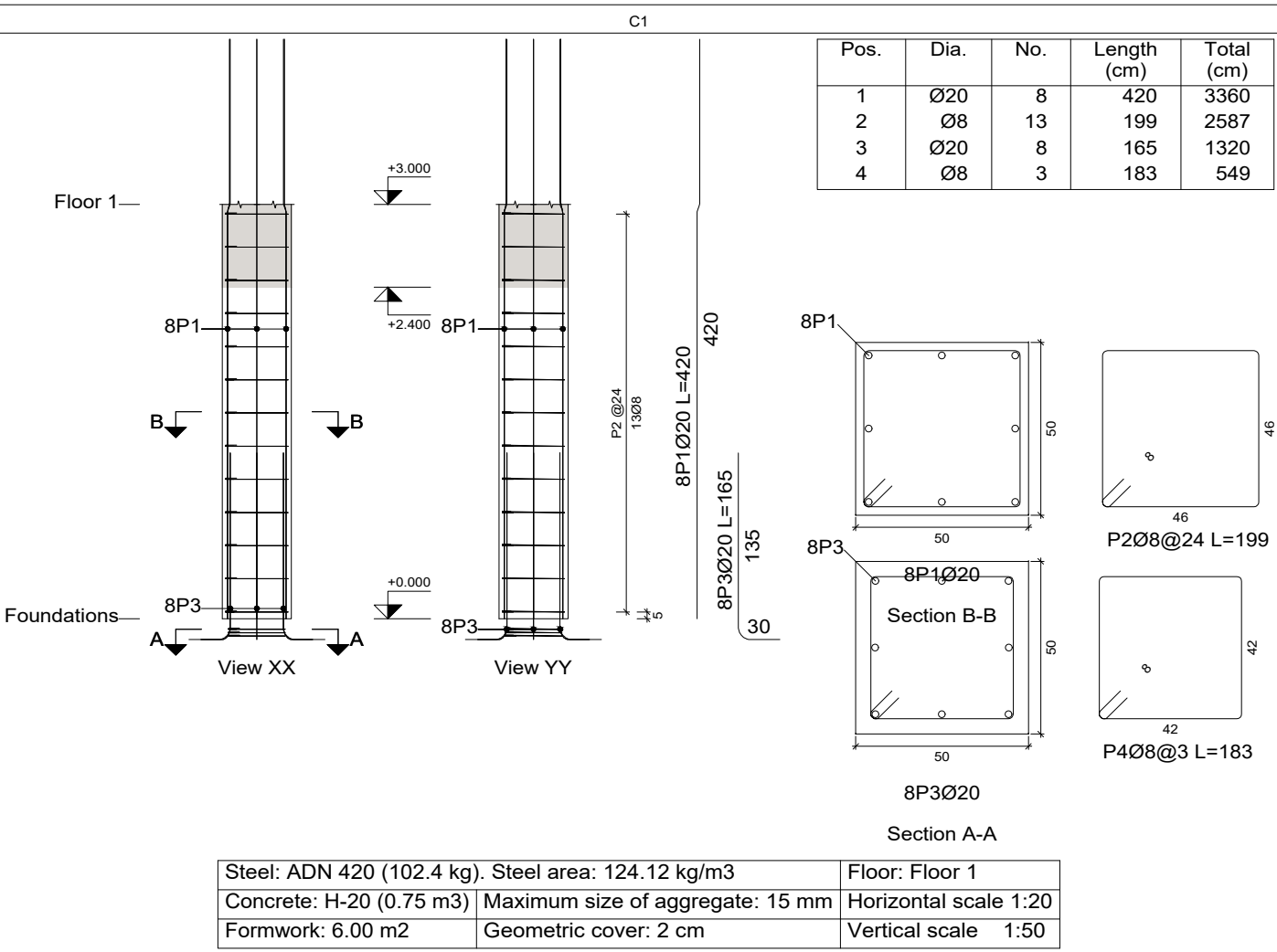
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C1	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	17	8 46	199	3383	13.4
					Total+10%	105.9	

Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

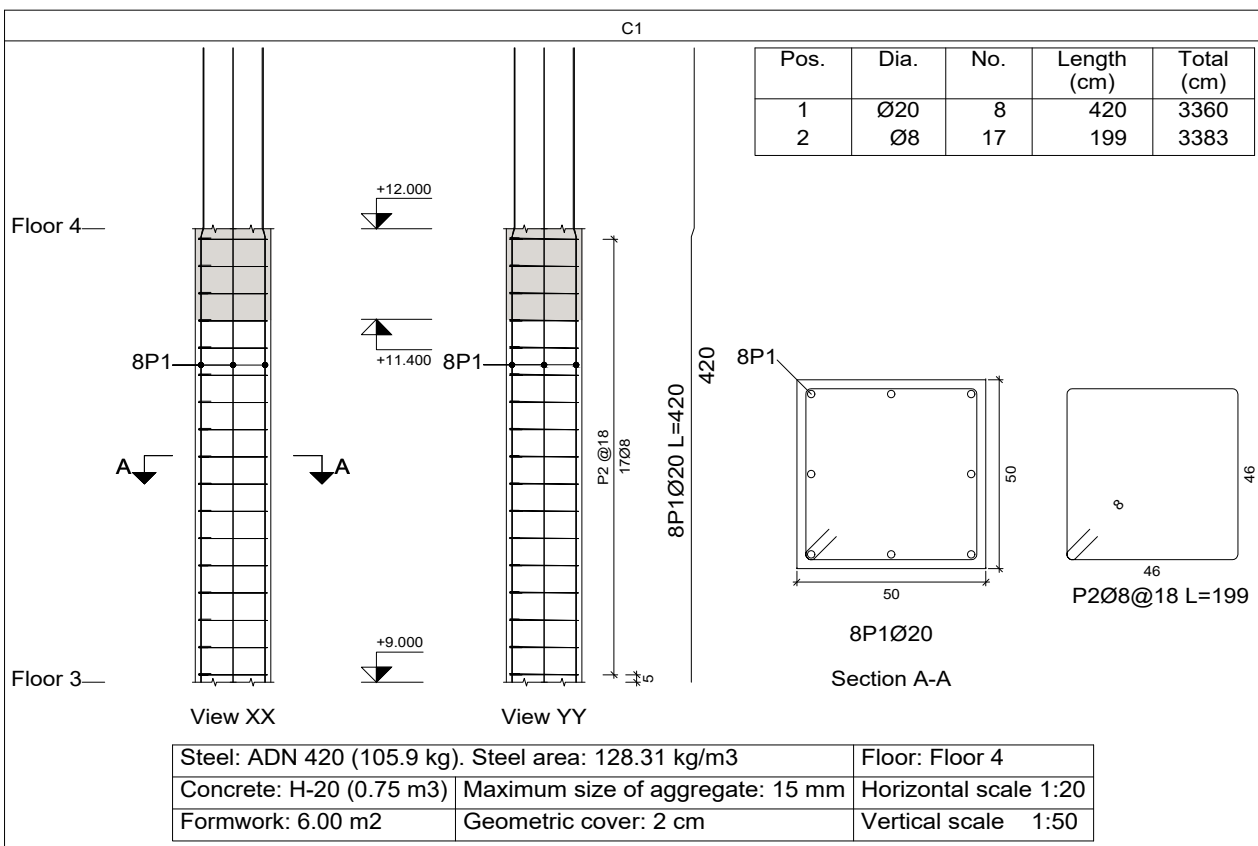
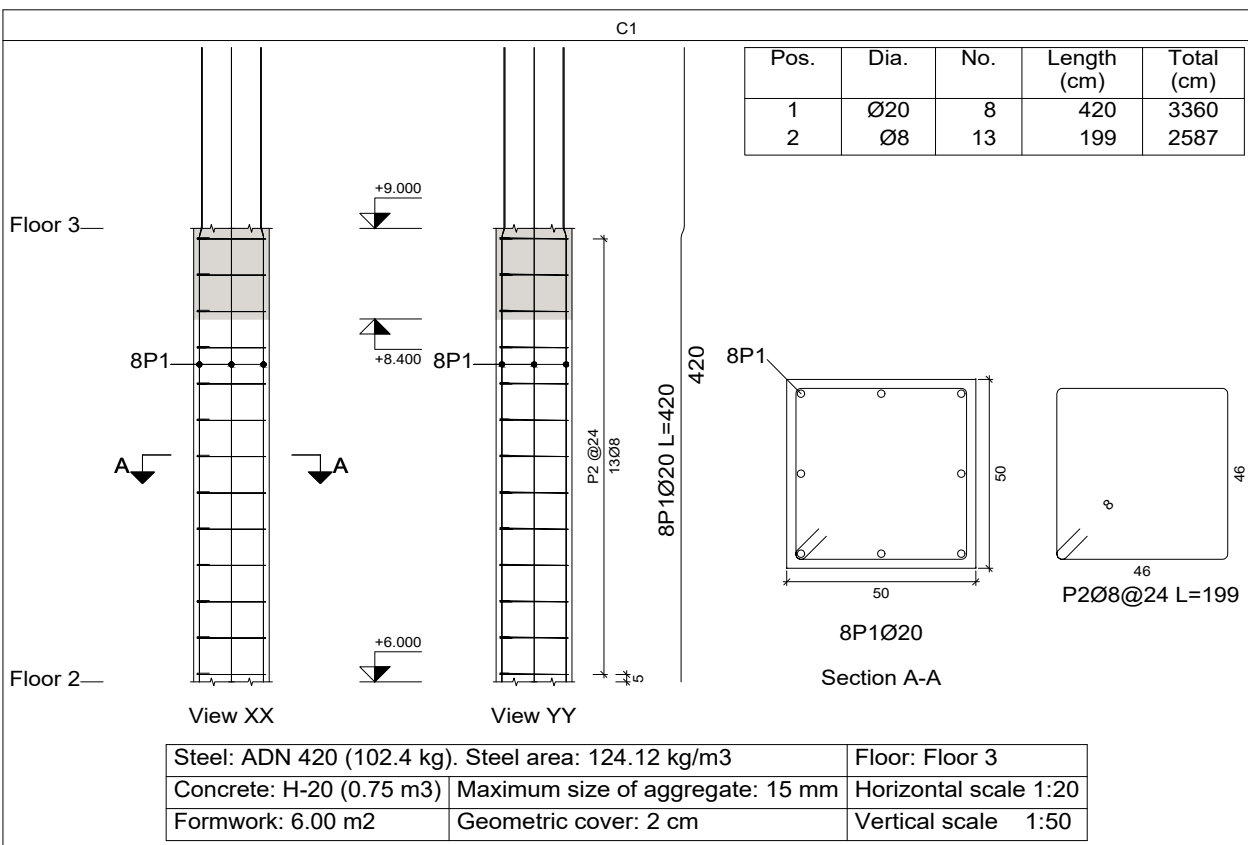
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C1	1	Ø20	8	295	298	2384	58.8
	2	Ø8	17	8 46	199	3383	13.4
					Total+10%	79.4	



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



Floor: Floor 1
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



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Columna 2

Project number 0001

Date 21/10/2020

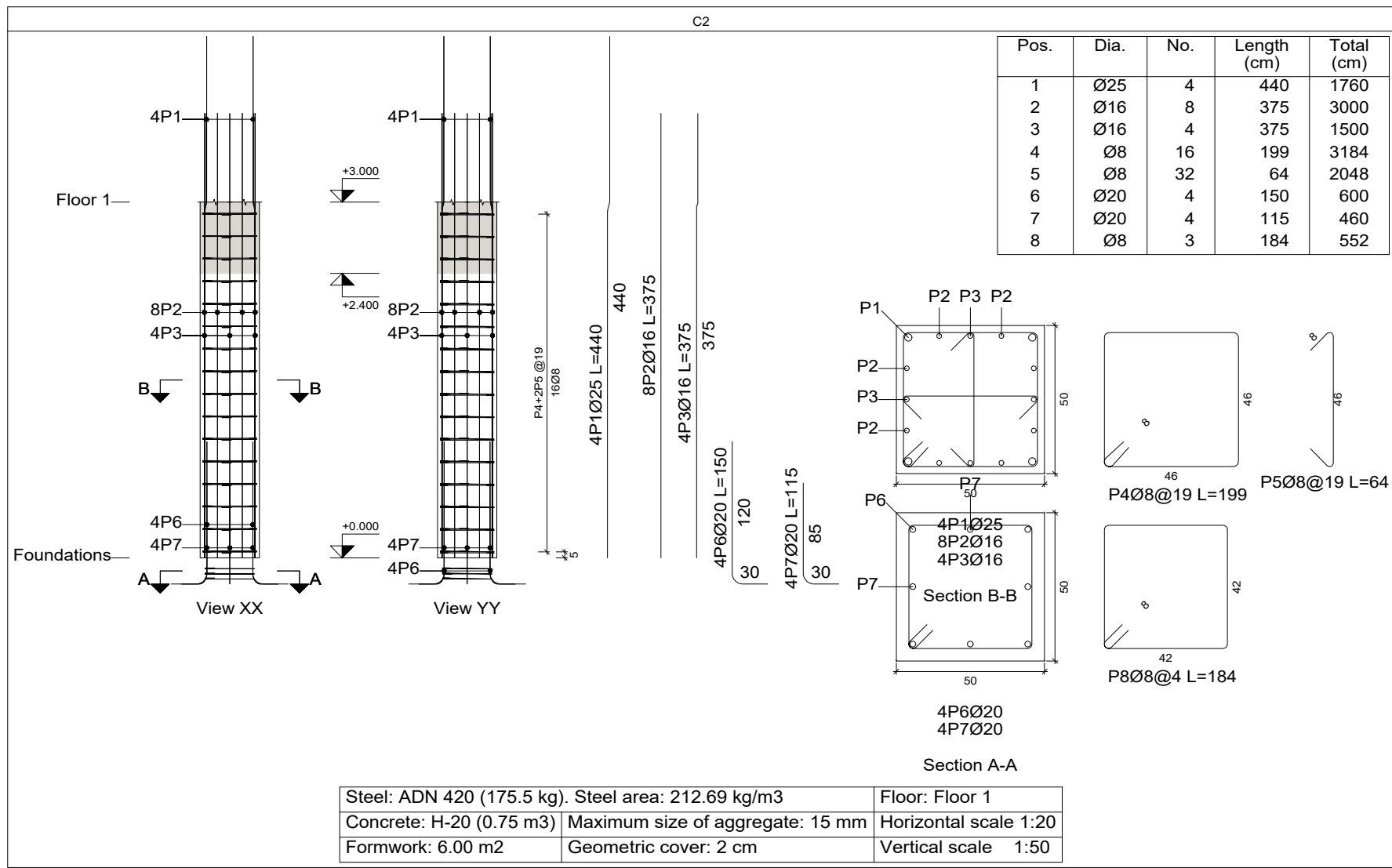
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A215

Scale 1 : 50

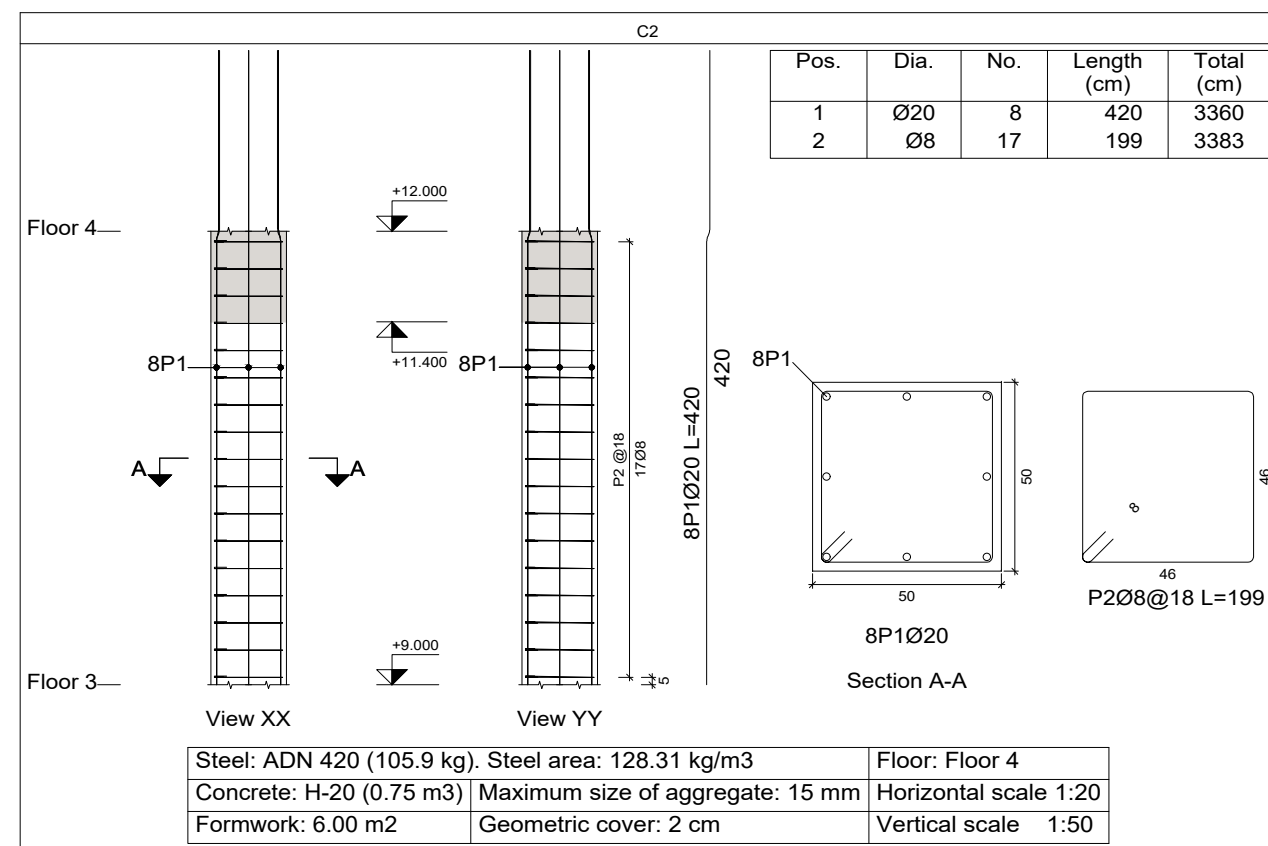
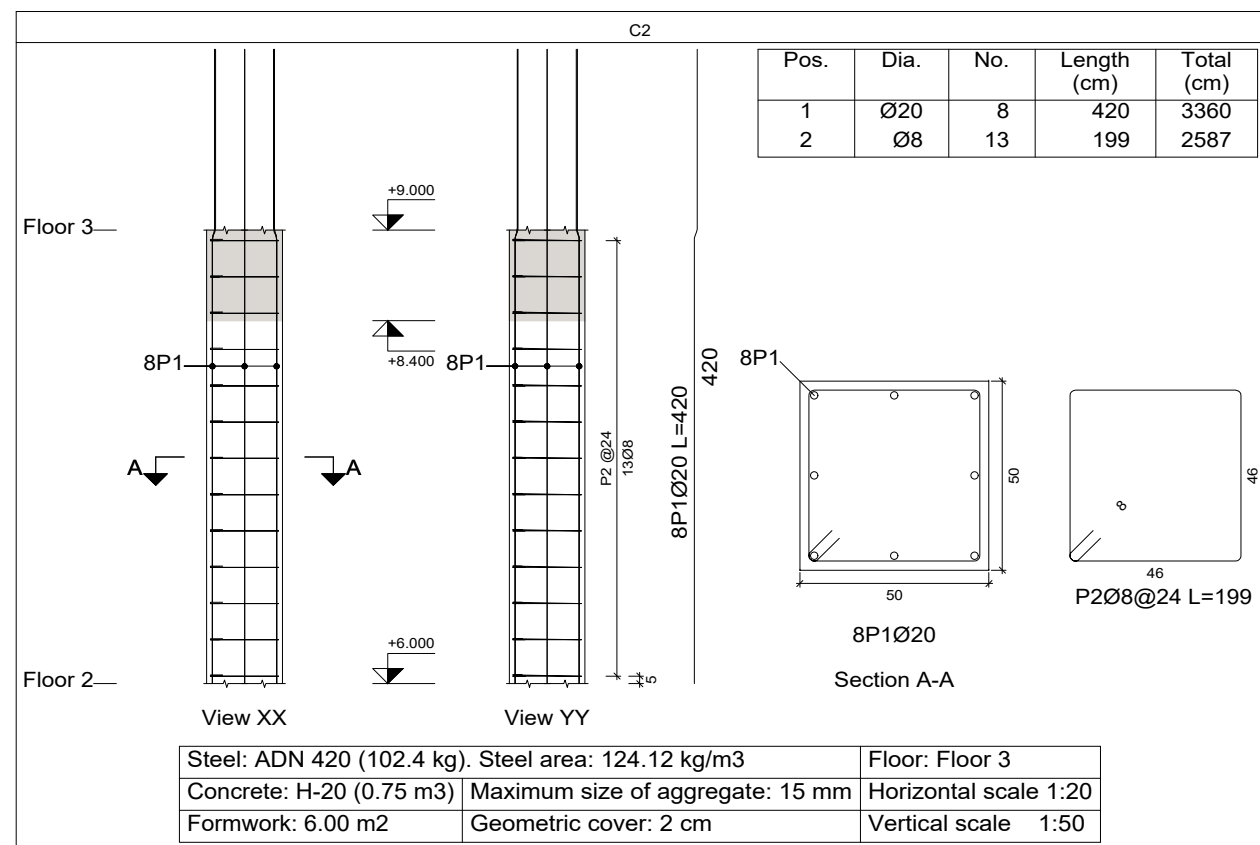
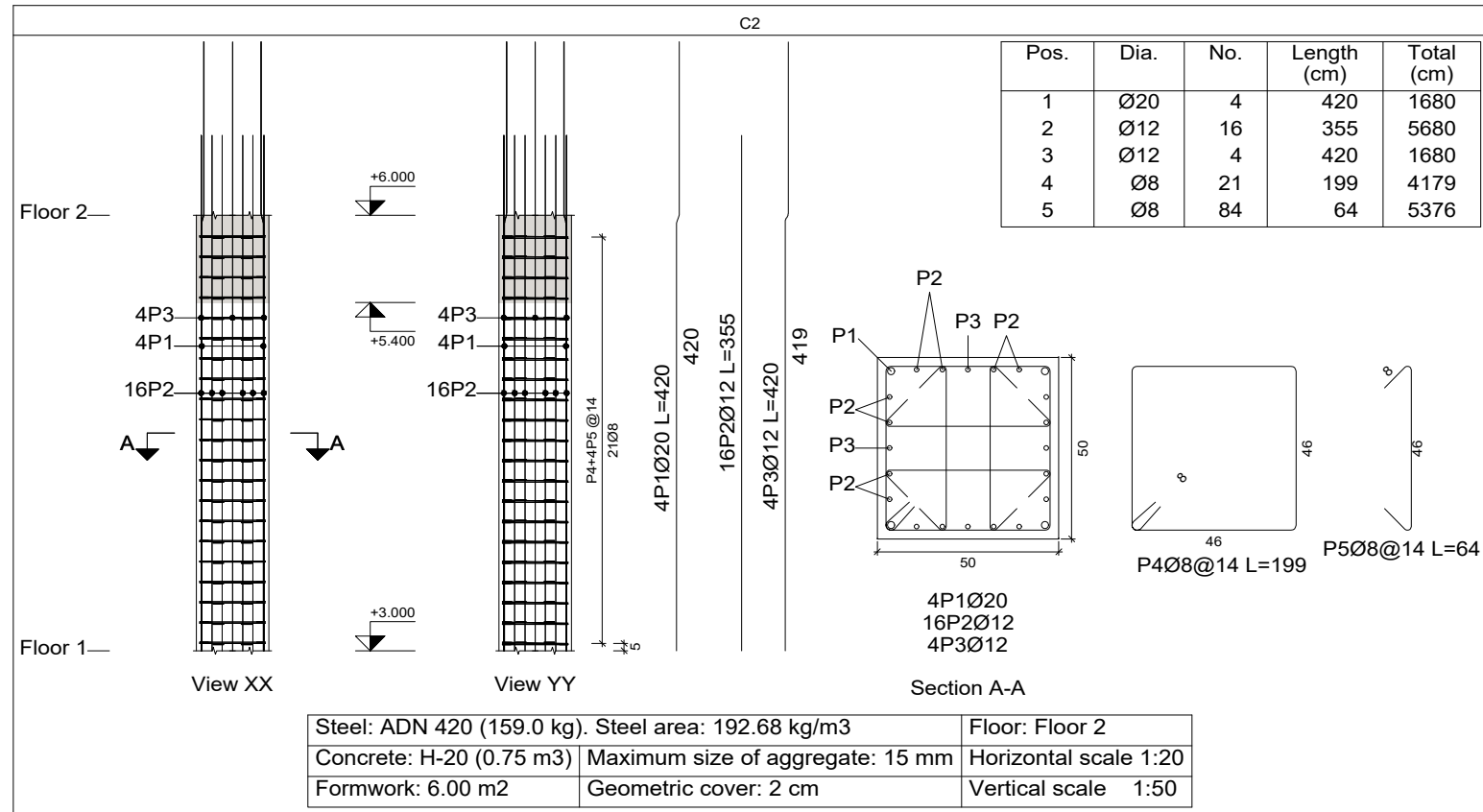
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C2	1	Ø20	4	295 120	420	1680	41.4
	2	Ø12	16	355	355	5680	50.4
	3	Ø12	4	297 119	420	1680	14.9
	4	Ø8	21	8 46	199	4179	16.5
	5	Ø8	84	5 45	64	5376	21.2
Total=10%							158.8



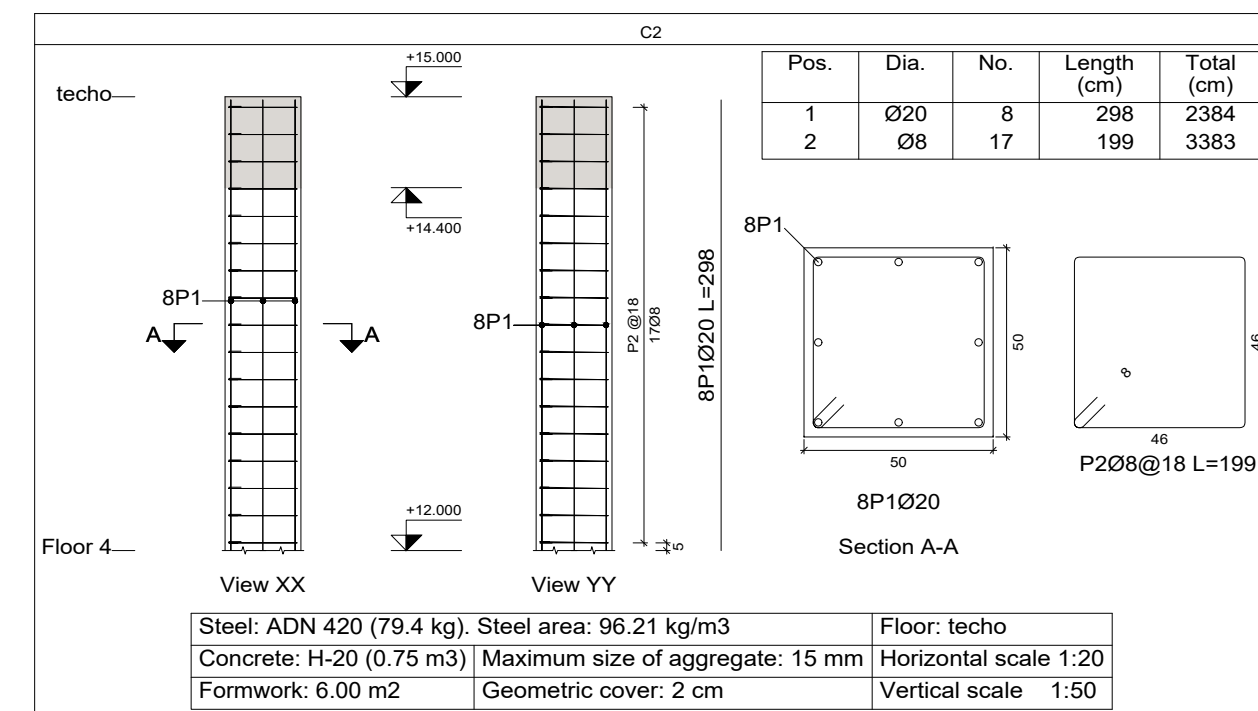
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C2	1	Ø25	4	294 140	440	1760	67.8
	2	Ø16	8	375	375	3000	47.4
	3	Ø16	4	296 75	375	1500	23.7
	4	Ø8	16	8 46	199	3184	12.6
	5	Ø8	32	8 46	64	2048	8.1
	6	Ø20	4	8 120	150	600	14.8
	7	Ø20	4	8 85	115	460	11.3
	8	Ø8	3	8 42	184	552	2.2
Total=10%							206.7

Floor: Floor 1
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C2	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	8 46	199	2587	10.2
Total=10%							102.4



Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C2	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	17	8 46	199	3383	13.4
Total=10%							105.9



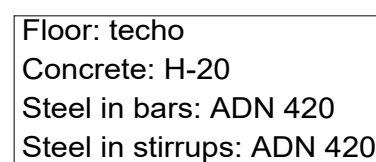
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C2	1	Ø20	8	298	2384	58.8	
	2	Ø8	17	8 46	199	3383	13.4
Total=10%							79.4

Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Columna 3

Scale 1 : 50



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Columna 4

Project number 0001

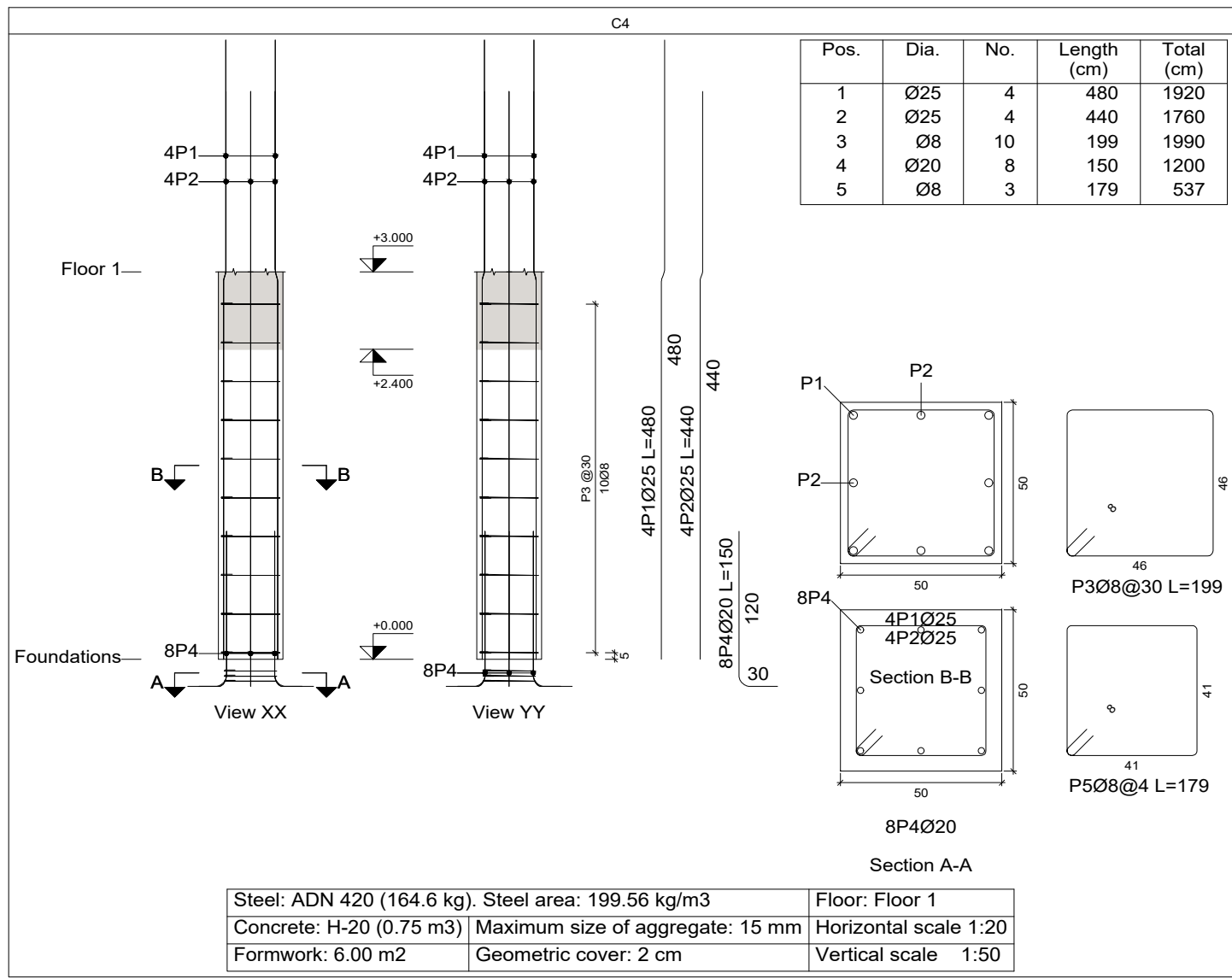
Date 21/10/2020

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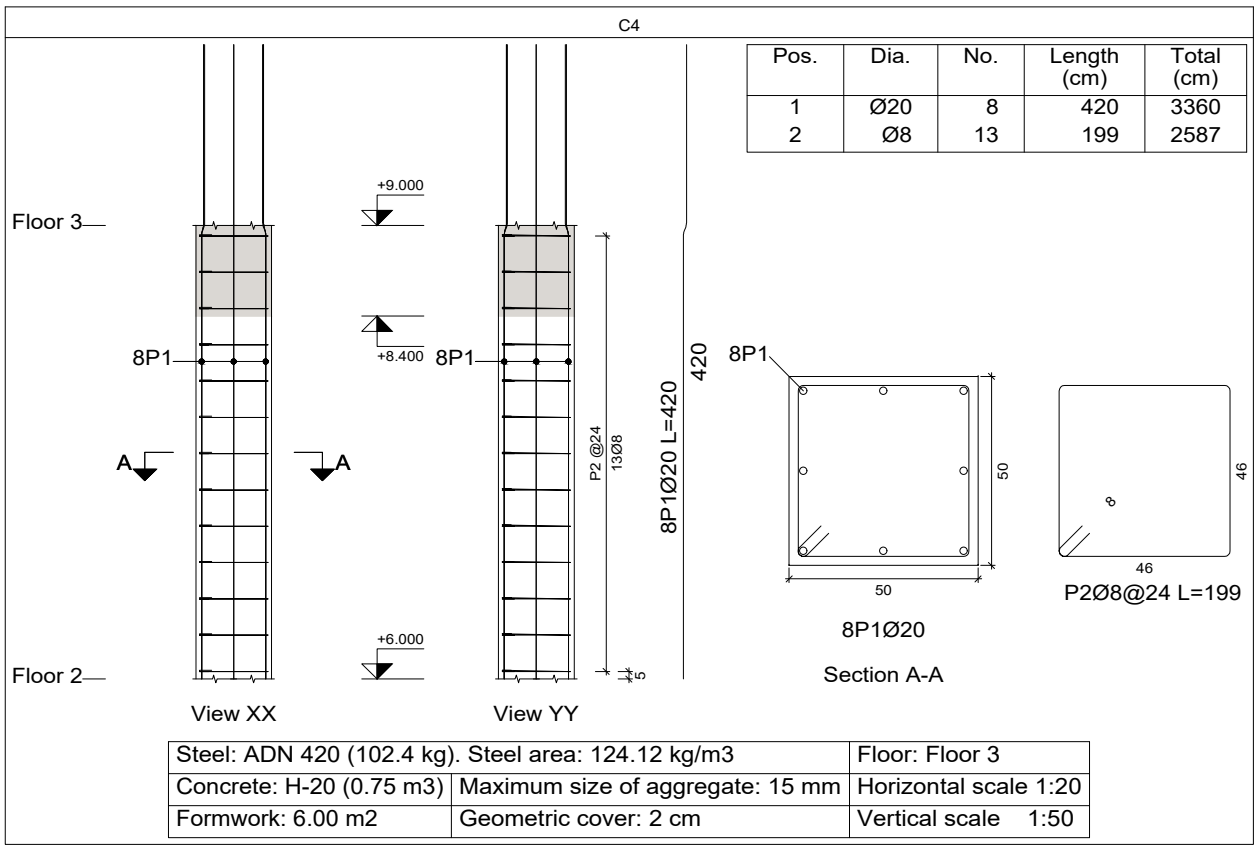
A217

Scale 1 : 50



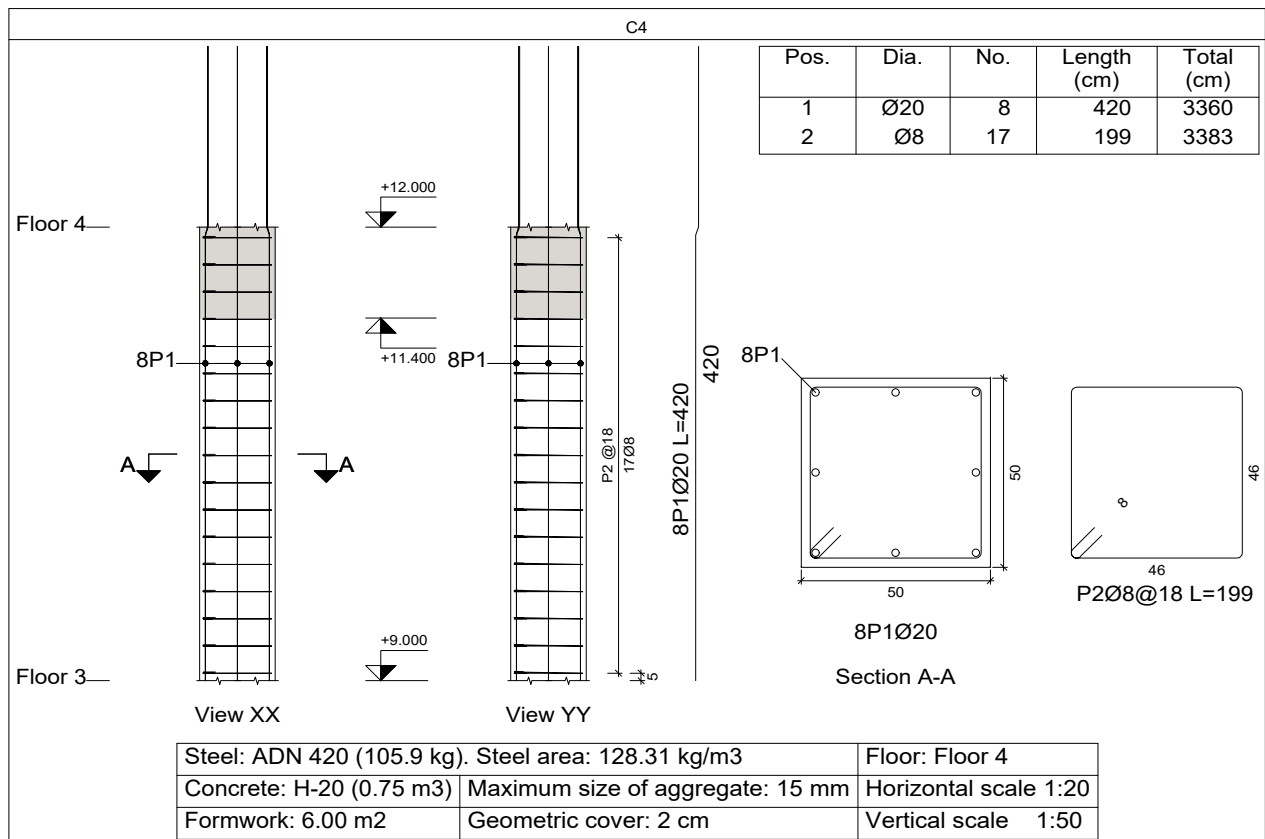
Floor: Floor 1
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C4	1	Ø20	8	295	120	420	3360
	2	Ø8	13	46	199	2587	10.2
Total+10%:							102.4



Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

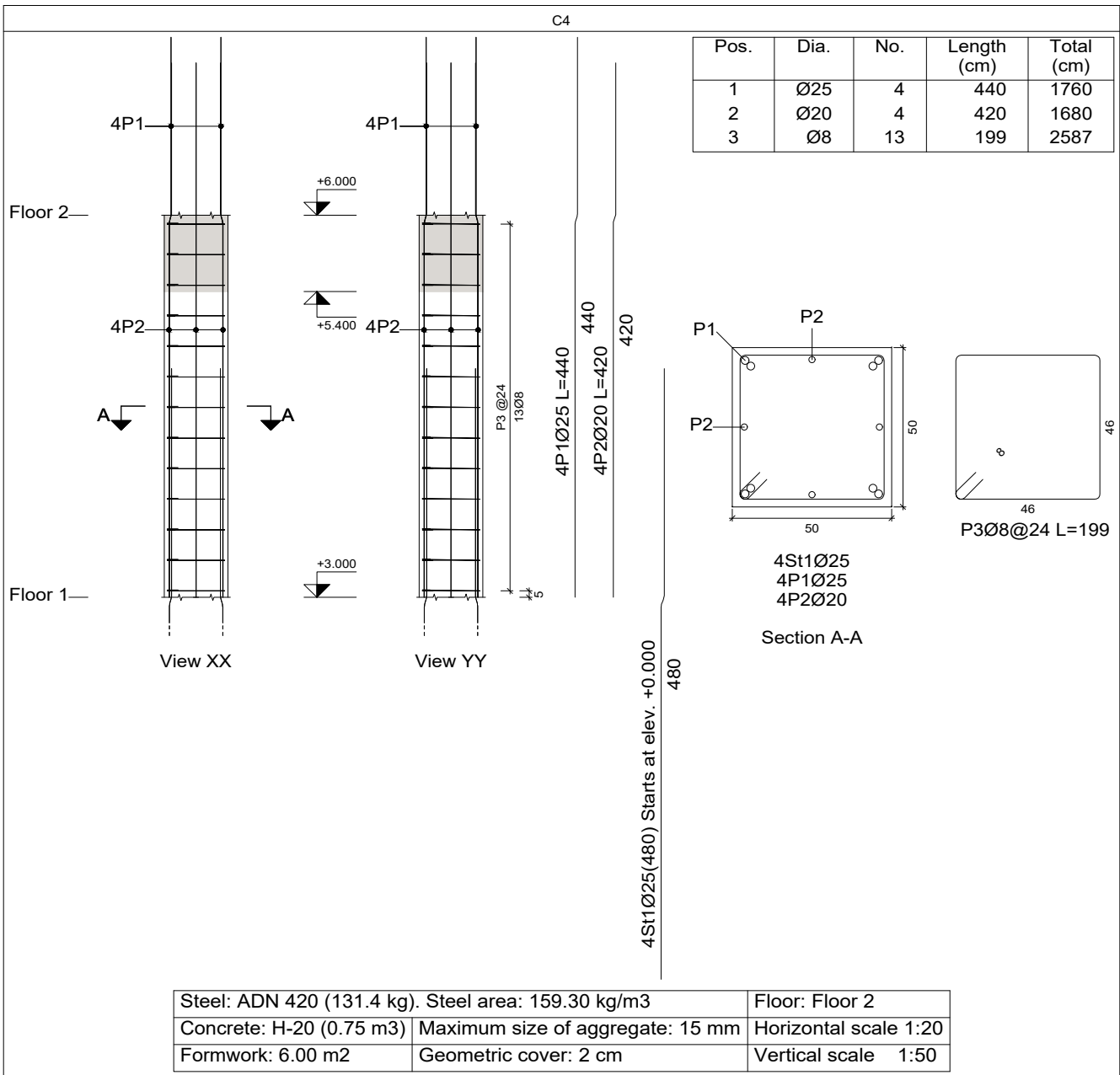
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C4	1	Ø20	8	295	120	420	3360
	2	Ø8	17	46	199	3383	13.4
Total+10%:							105.9



Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

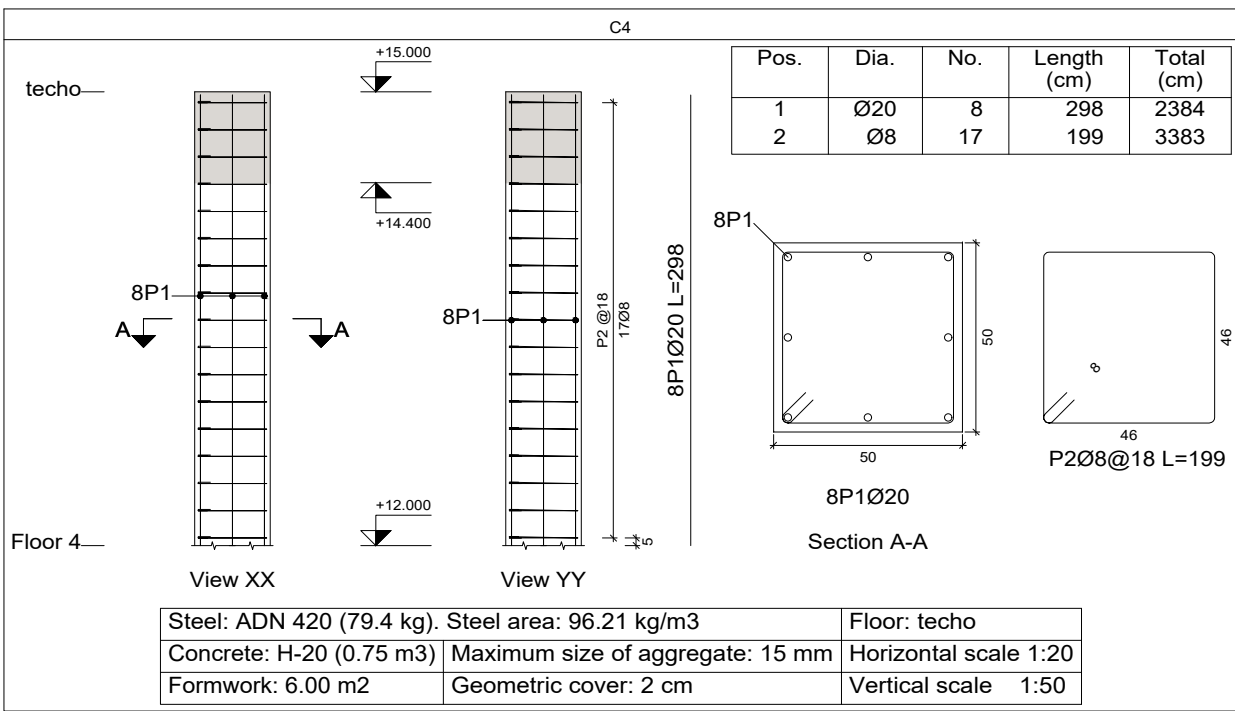
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C4	1	Ø25	4	284	180	480	1920
	2	Ø25	4	284	180	440	1760
	3	Ø8	10	46	199	1990	7.9
	4	Ø20	8	120	150	1200	29.6
	5	Ø8	3	41	179	537	2.1
Total+10%:							199.5
Ø8: 11.0							
Ø20: 32.5							
Ø25: 166.0							
Total: 199.5							

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C4	1	Ø25	4	284	140	440	1760
	2	Ø20	4	295	120	420	1680
	3	Ø8	13	46	199	2587	10.2
Total+10%:							131.3



Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C4	1	Ø20	8	295	120	420	3360
	2	Ø8	17	46	199	3383	13.4
Total+10%:							79.4



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Columna 5

Scale 1 : 50

Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Trabajo Final:
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Columna 6

Project number 0001

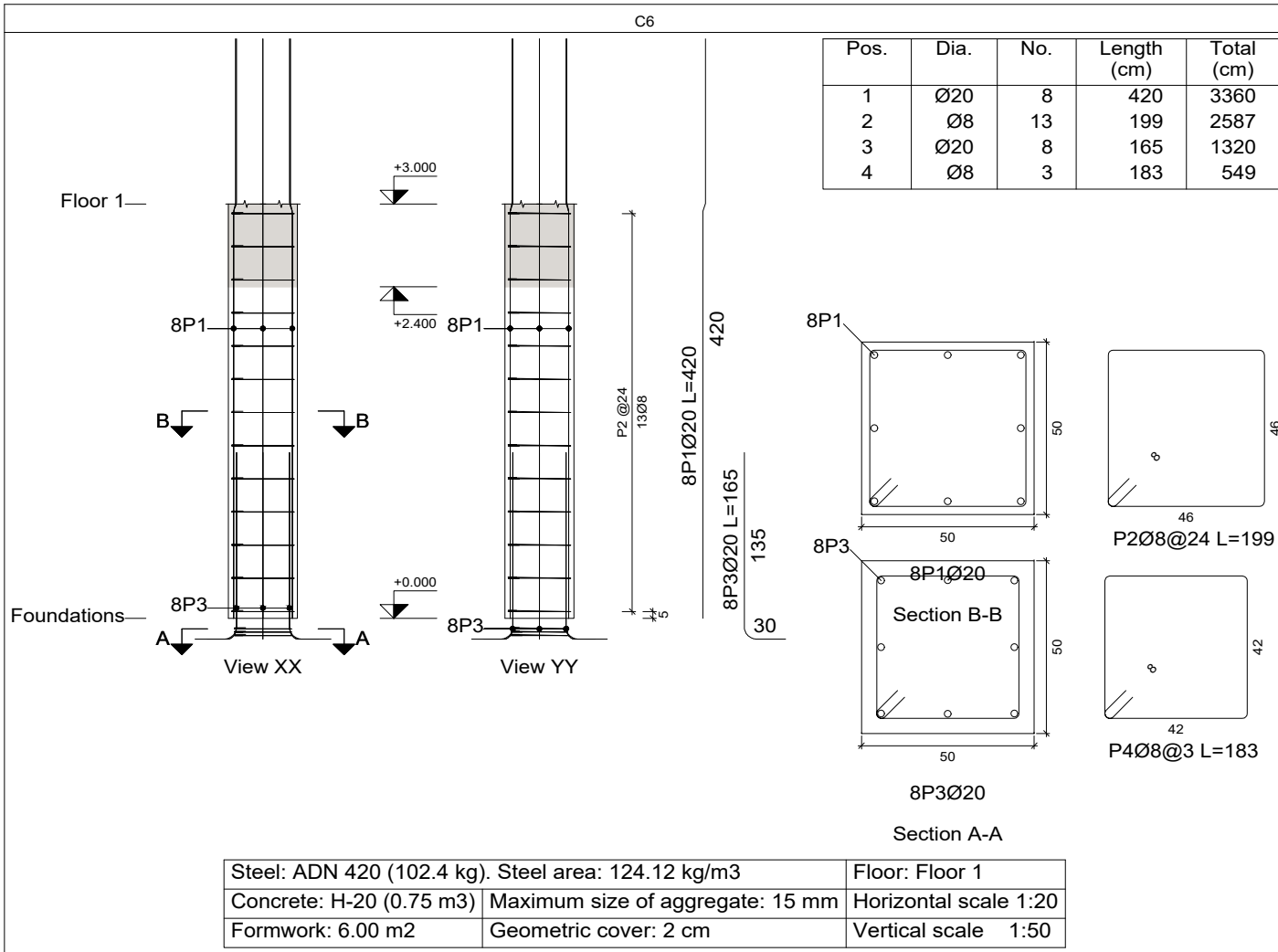
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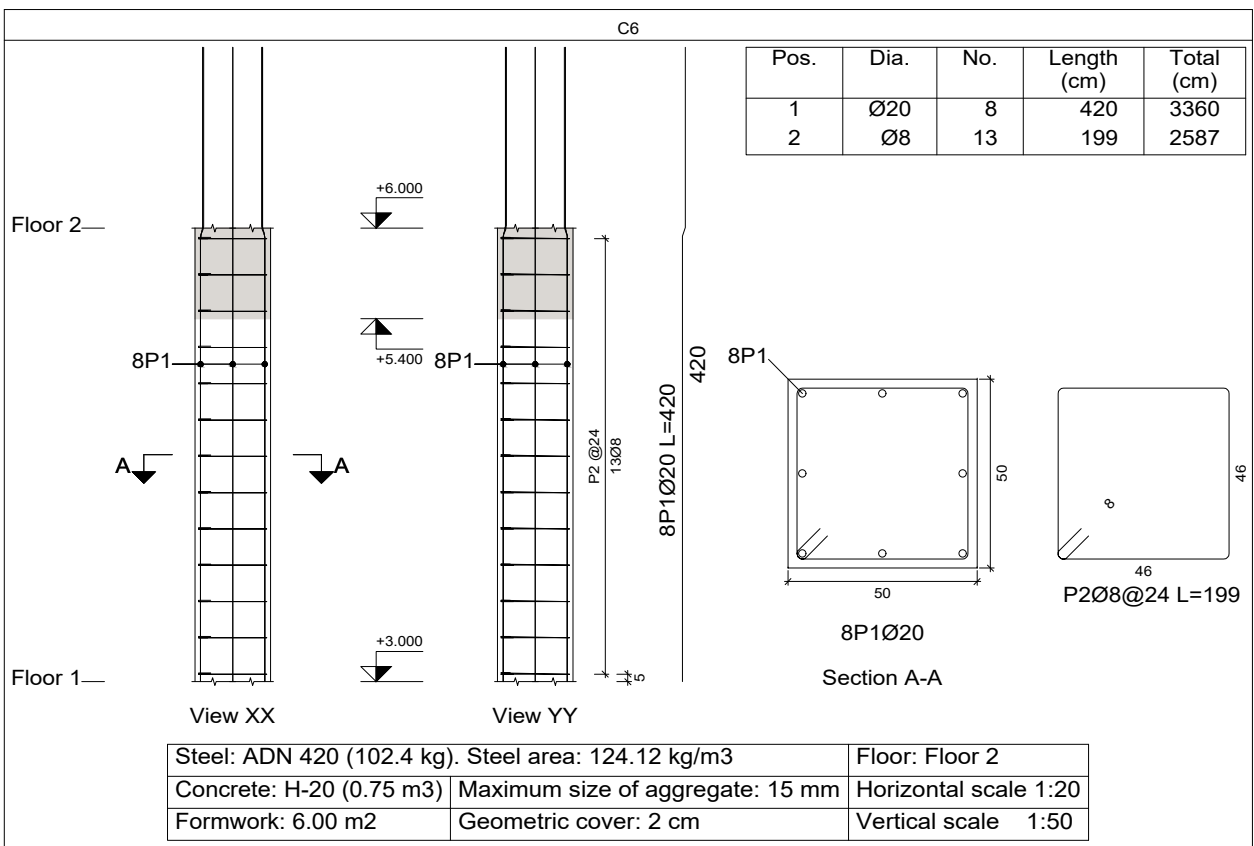
A219

Scale 1 : 50

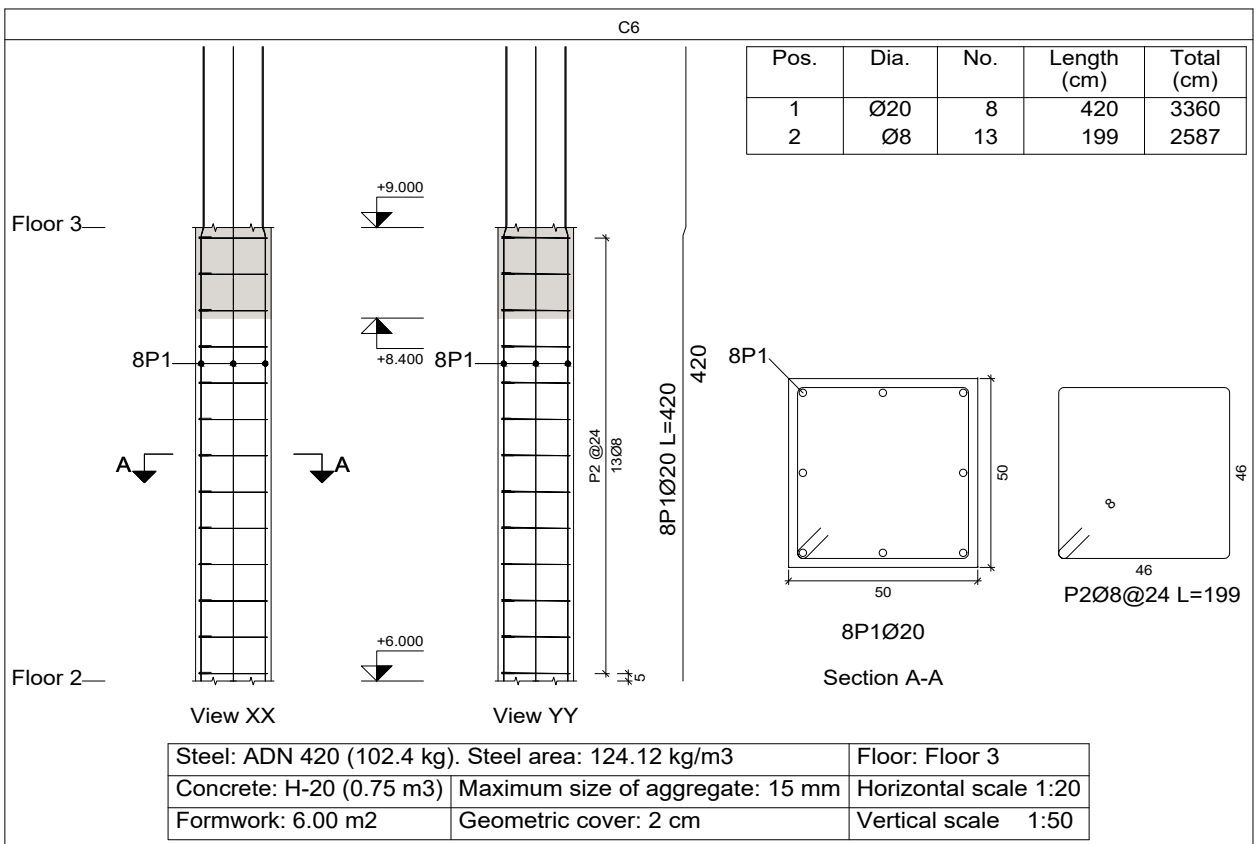


Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C6	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46	199	2587	10.2
	3	Ø20	8	135	165	1320	32.6
	4	Ø8	3	42	183	549	2.2
Total+10%:					146.7		
Ø8:					13.6		
Ø20:					127.1		
Total:					140.7		

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C6	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46	199	2587	10.2
Total+10%:					102.4		



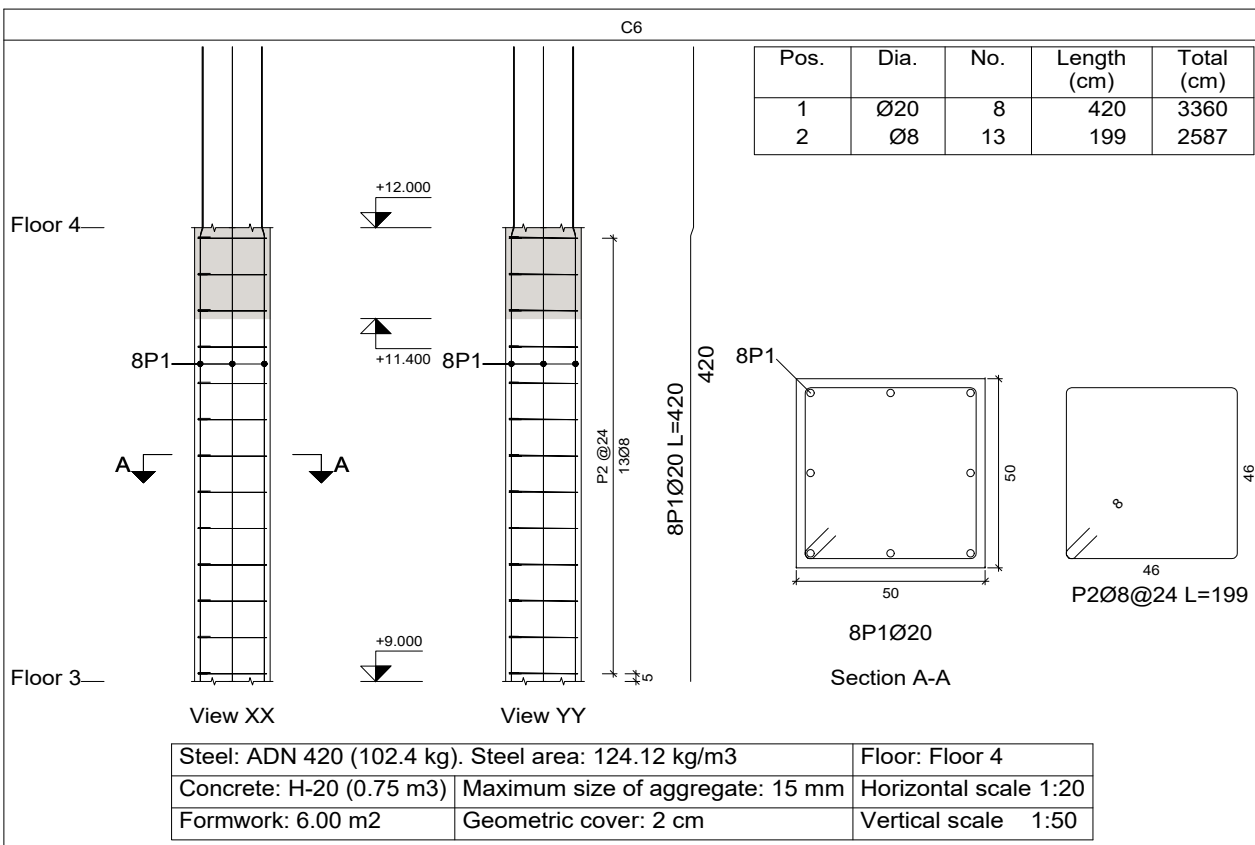
Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



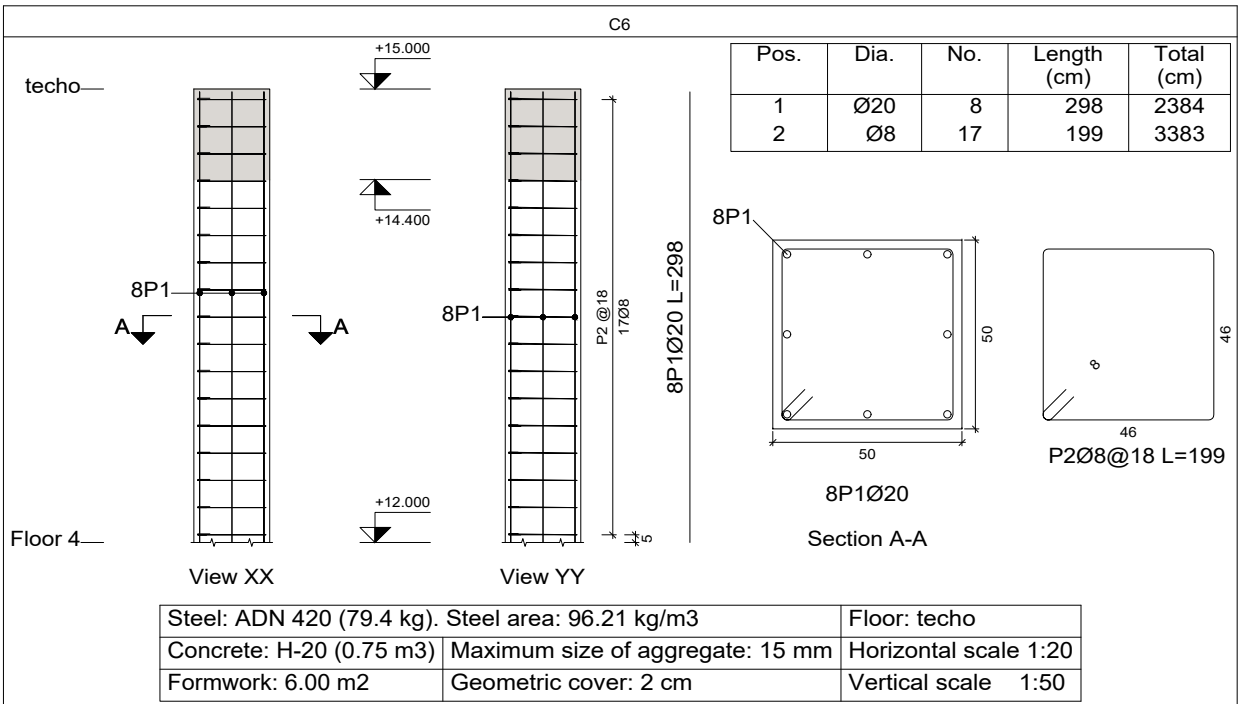
Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C6	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46	199	2587	10.2
Total+10%:					102.4		

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C6	1	Ø20	8	295	295	2384	58.8
	2	Ø8	17	46	199	3383	13.4
Total+10%:					79.4		



Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Columna 8

Project number0001

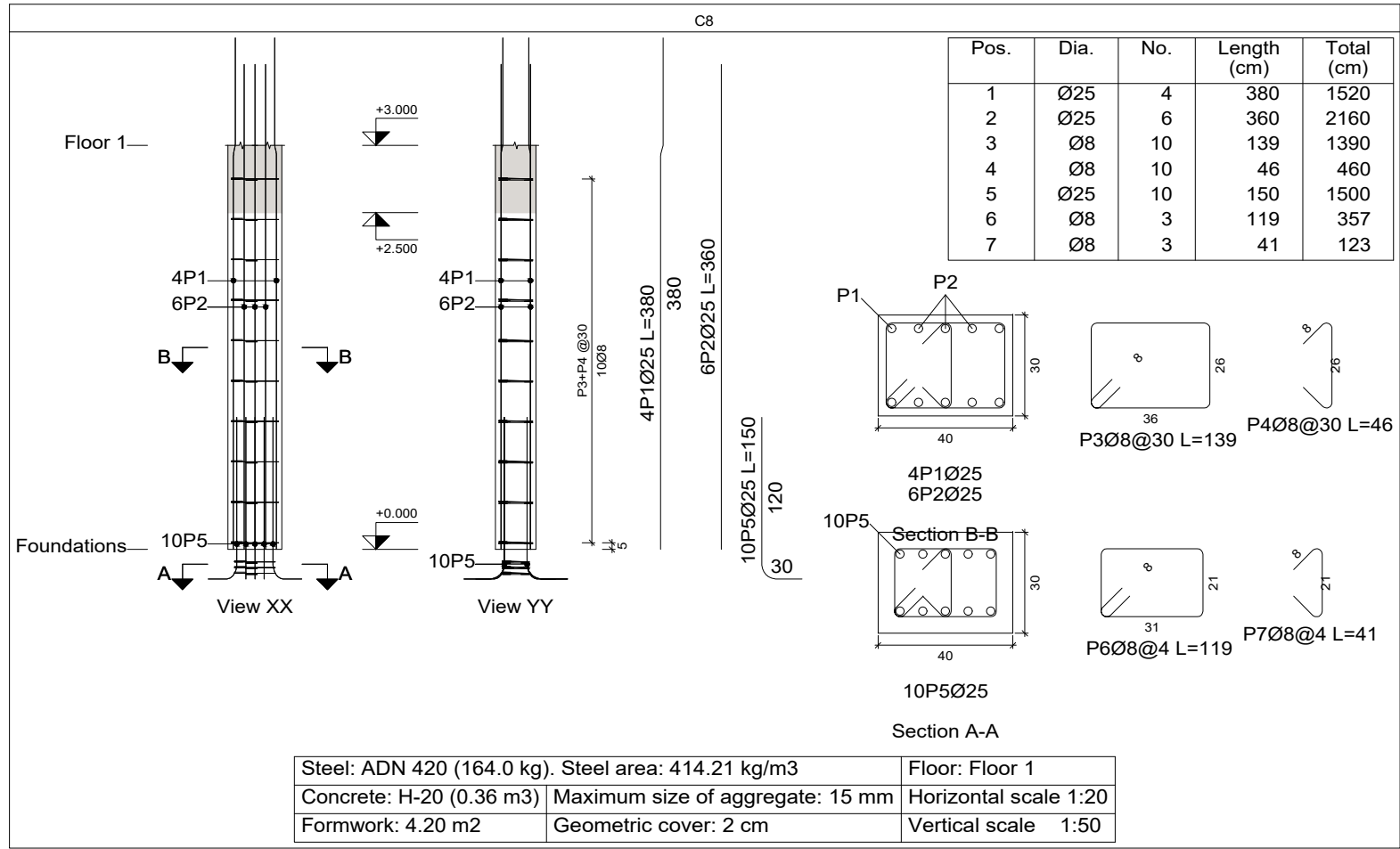
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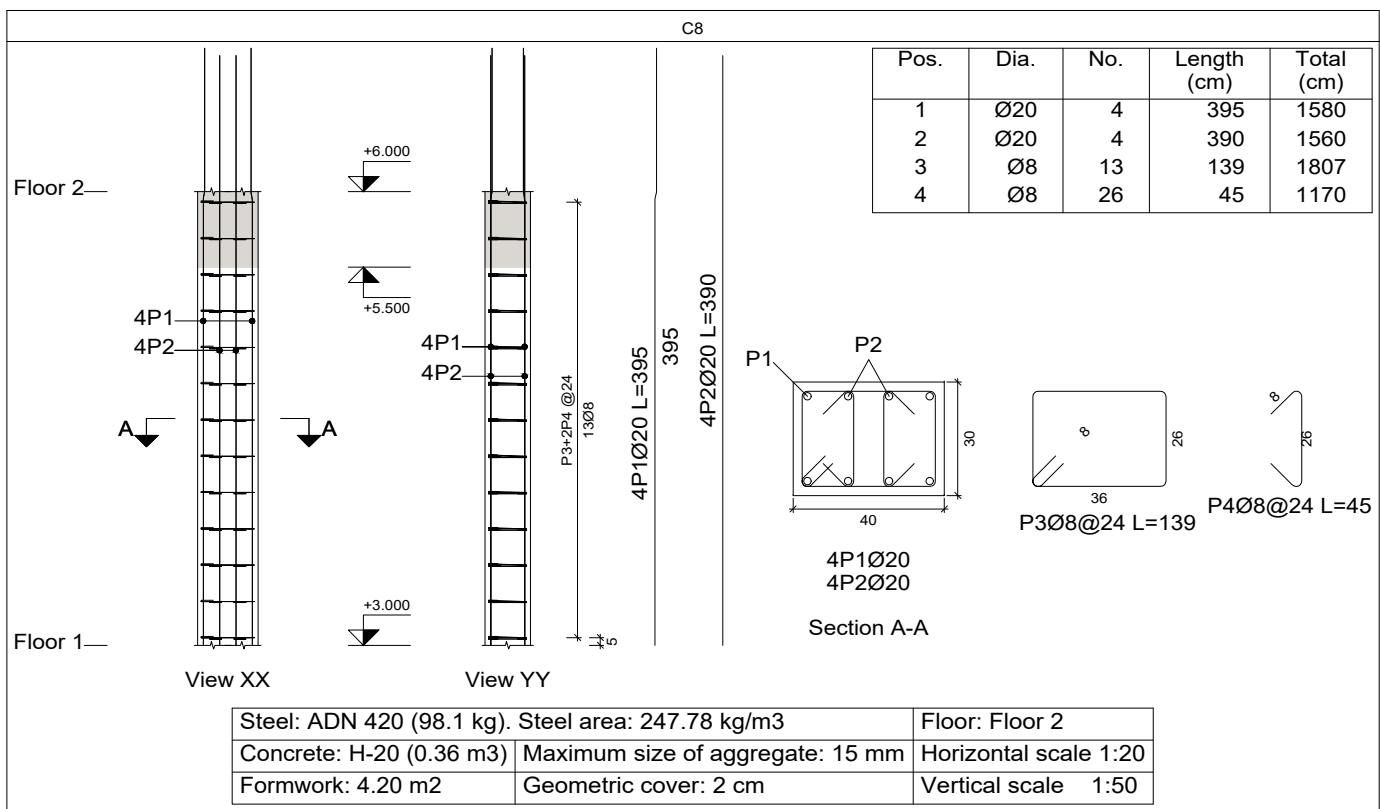
Scale1 : 50



Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø25	4		380	1520	58.6
	2	Ø25	6		360	2160	83.2
	3	Ø8	10		139	1390	5.5
	4	Ø8	10		46	460	1.8
	5	Ø25	10		150	1500	57.8
	6	Ø8	3		119	357	1.4
	7	Ø8	3		41	123	0.5
Total+10%:					229.7		

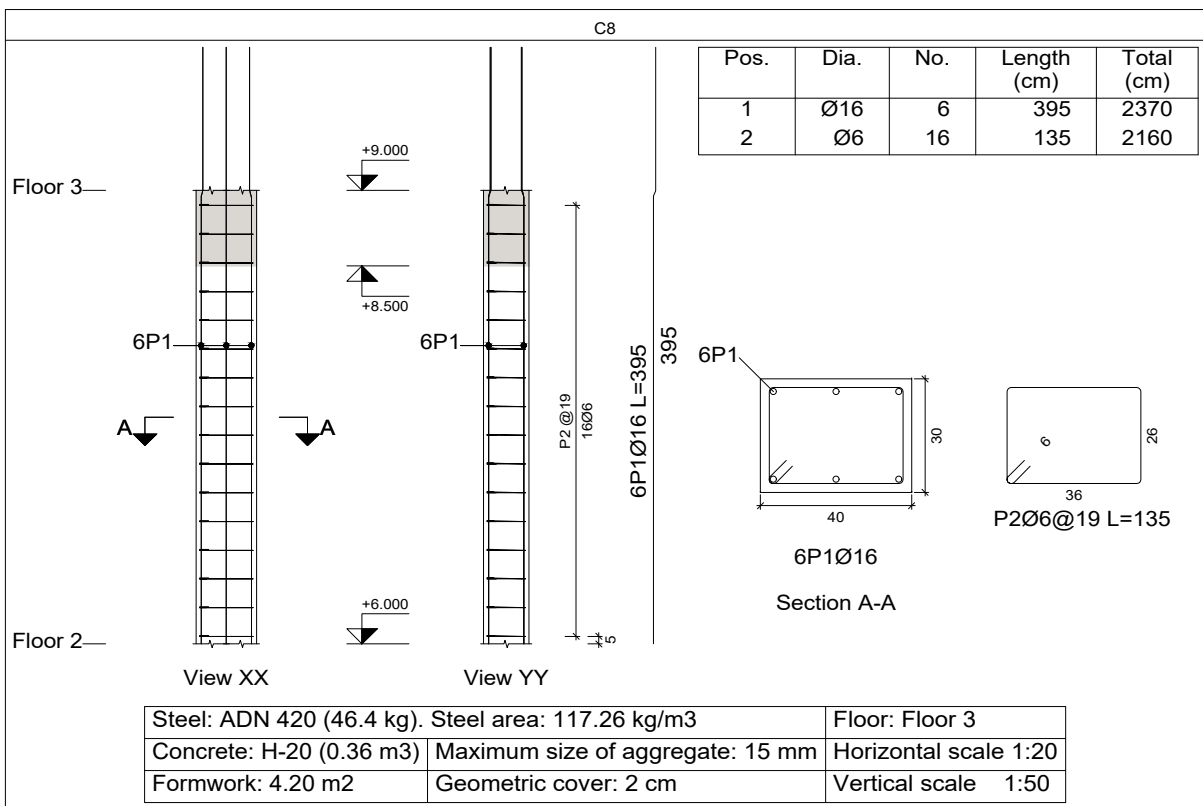
Floor: Floor 1
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø20	4		395	1580	39.0
	2	Ø20	4		390	1560	38.5
	3	Ø8	13		139	1807	7.1
	4	Ø8	26		45	1170	4.6
Total+10%:					98.1		



Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

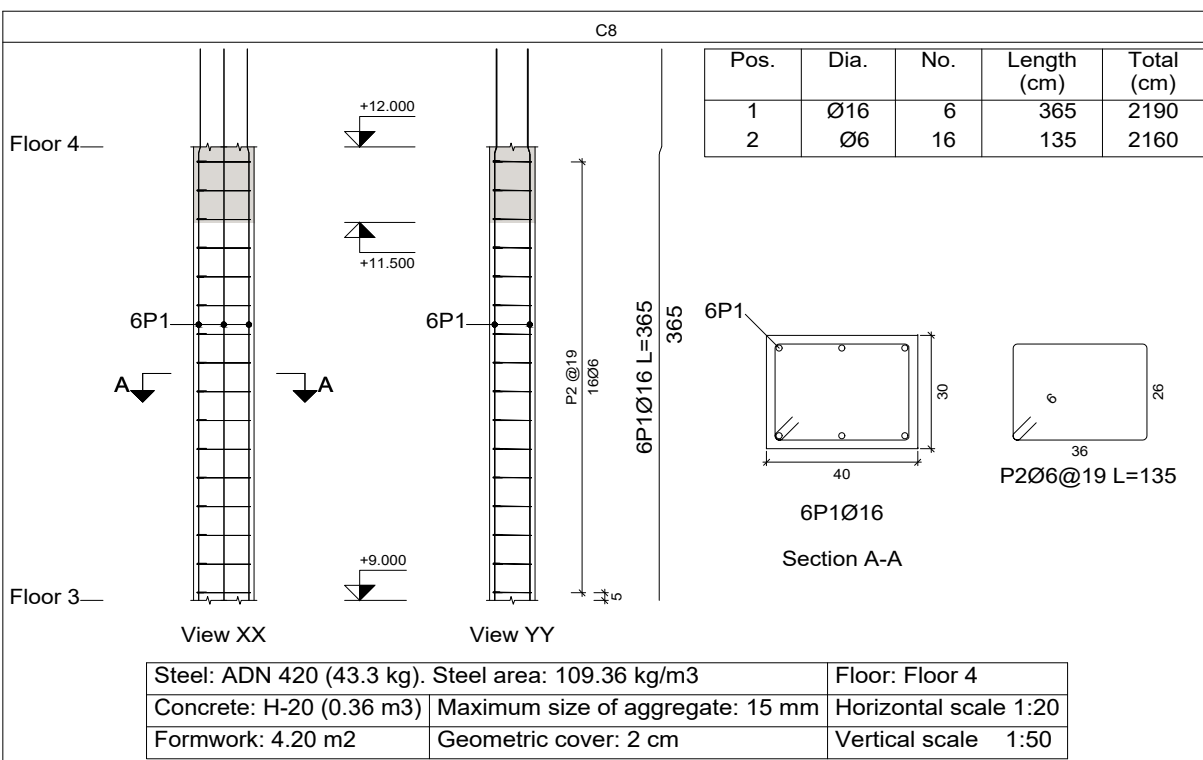
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø16	6		395	2370	37.4
	2	Ø6	16		135	2160	4.8
Total+10%:					46.4		



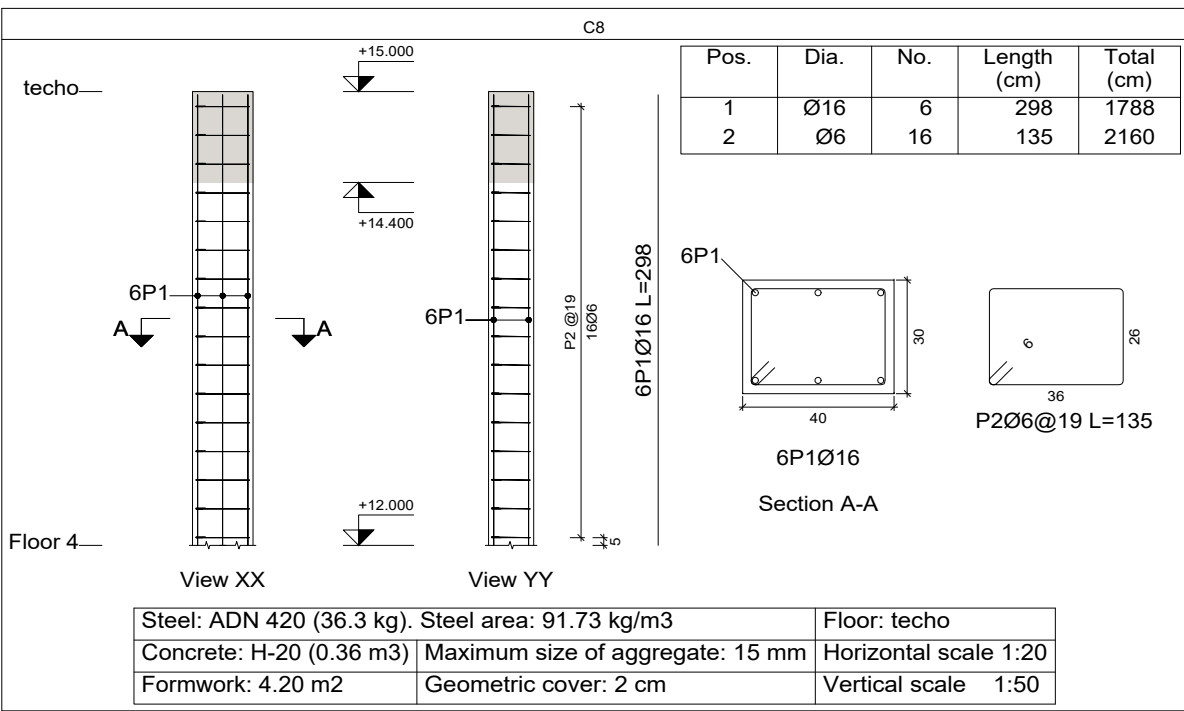
Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø16	6		365	2190	34.6
	2	Ø6	16		135	2160	4.8
Total+10%:					43.3		

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø16	6		298	1788	28.2
	2	Ø6	16		135	2160	4.8
Total+10%:					36.3		



Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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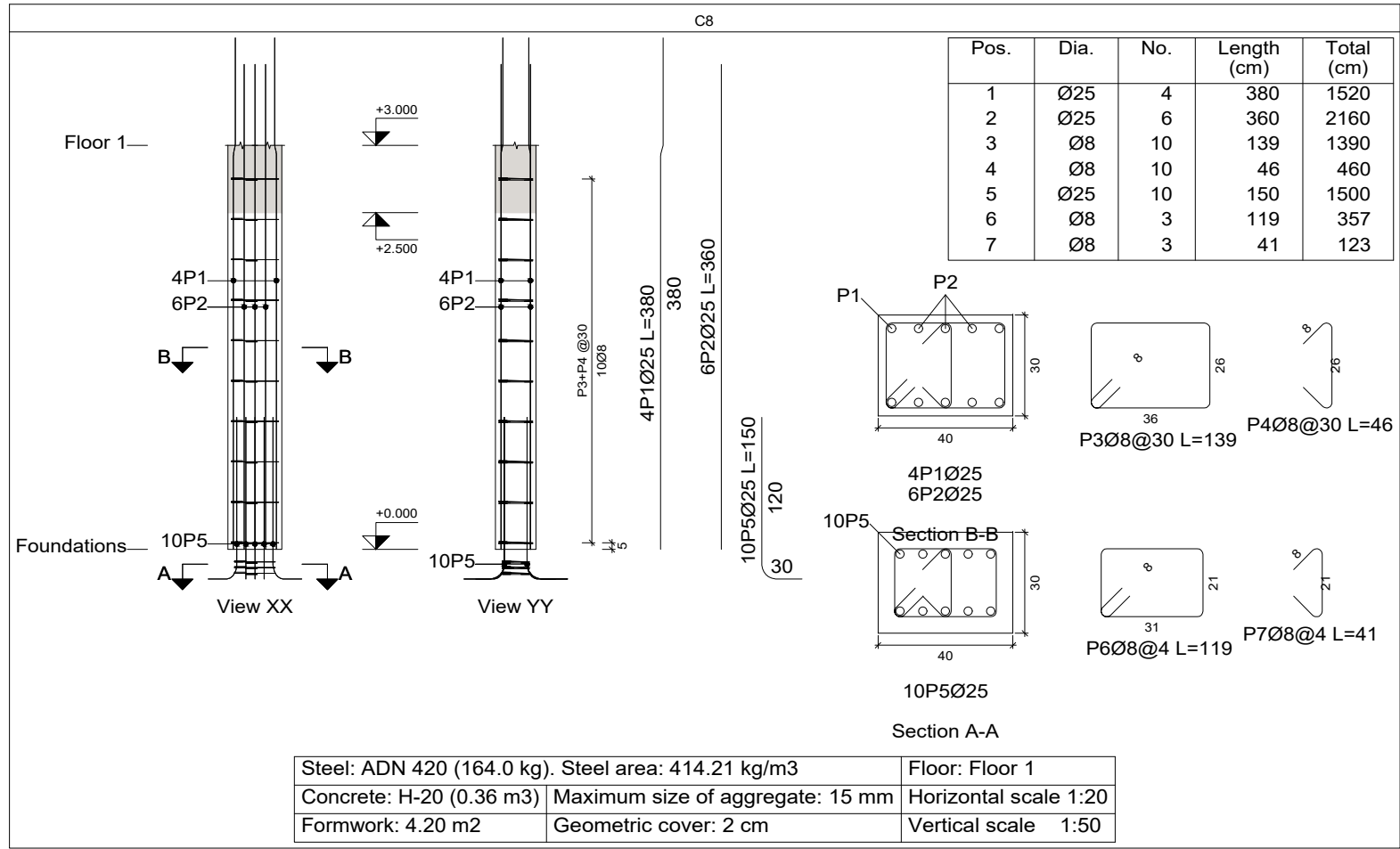
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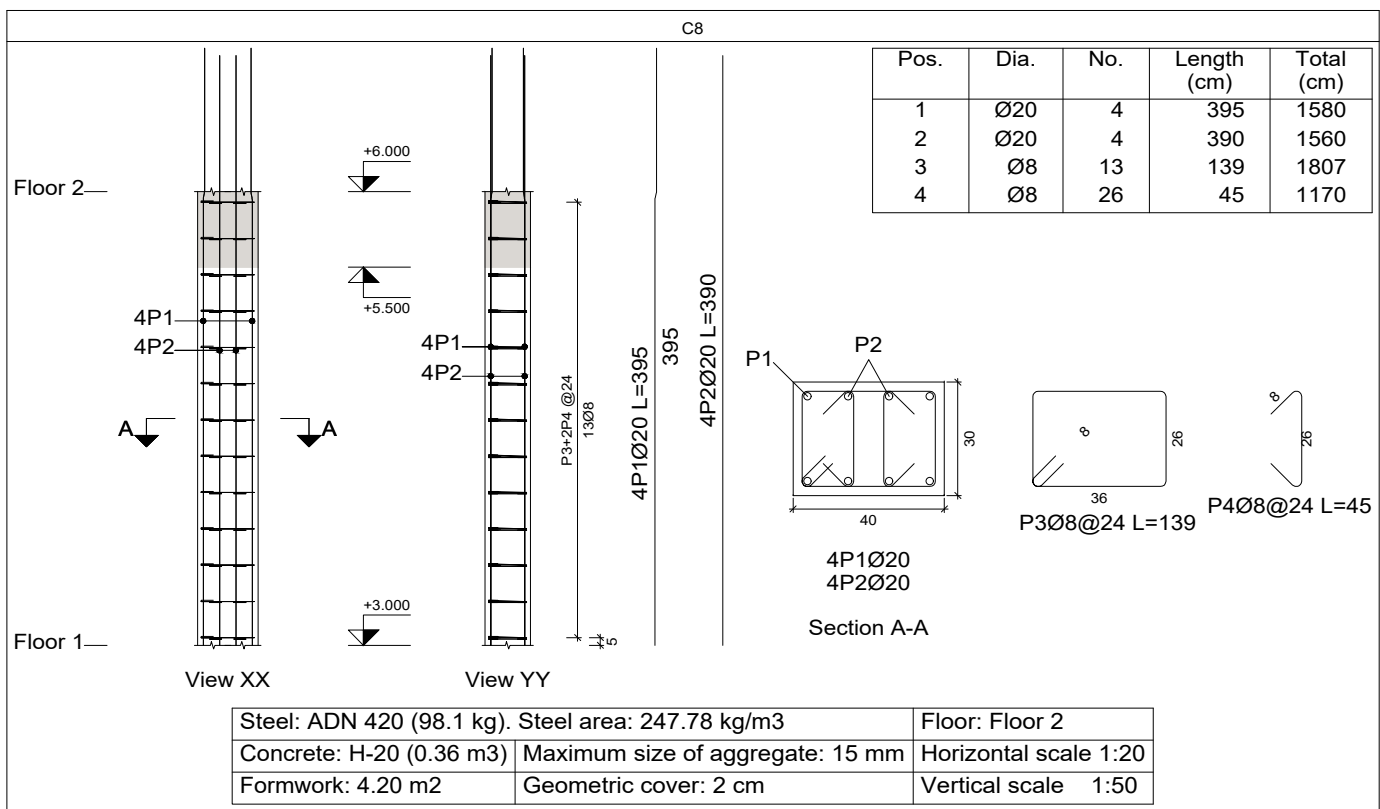
Scale1 : 50



Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø25	4		380	1520	58.6
	2	Ø25	6		360	2160	83.2
	3	Ø8	10		139	1390	5.5
	4	Ø8	10		46	460	1.8
	5	Ø25	10		150	1500	57.8
	6	Ø8	3		119	357	1.4
	7	Ø8	3		41	123	0.5
Total+10%:					229.7		

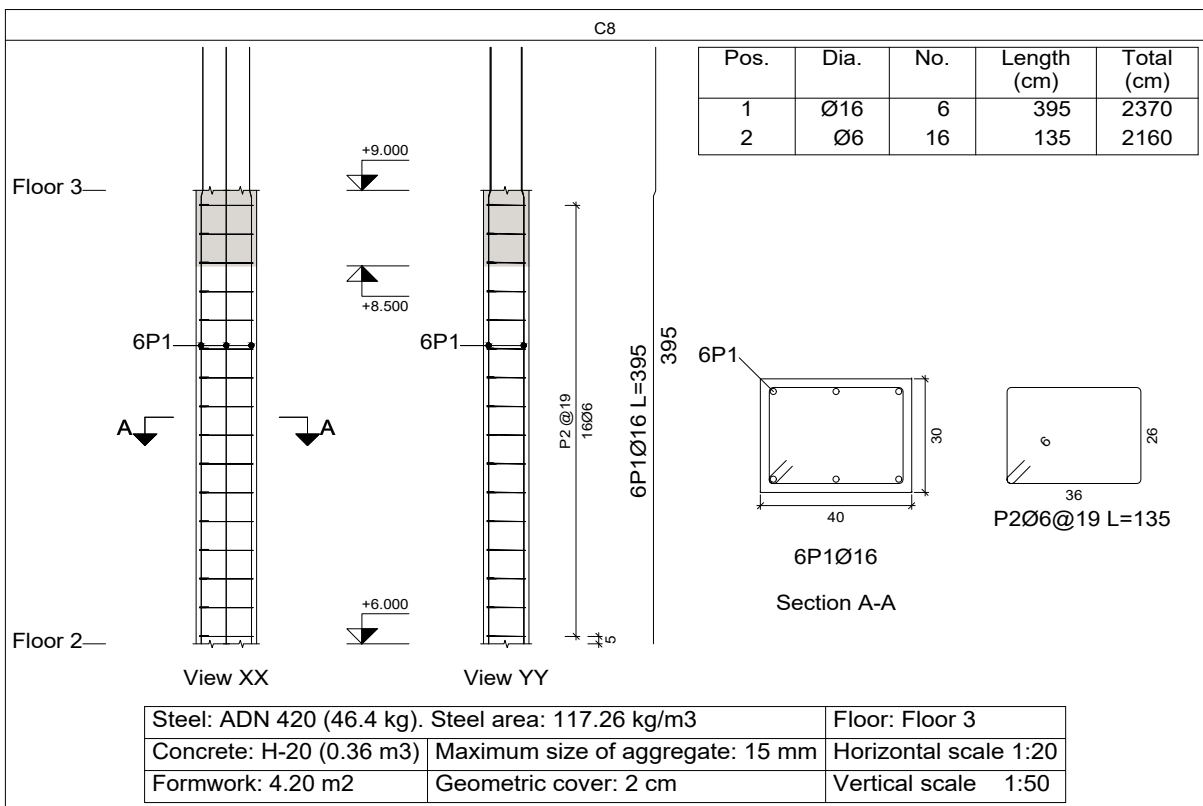
Floor: Floor 1
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø20	4		395	1580	39.0
	2	Ø20	4		390	1560	38.5
	3	Ø8	13		139	1807	7.1
	4	Ø8	26		45	1170	4.6
Total+10%:					98.1		



Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

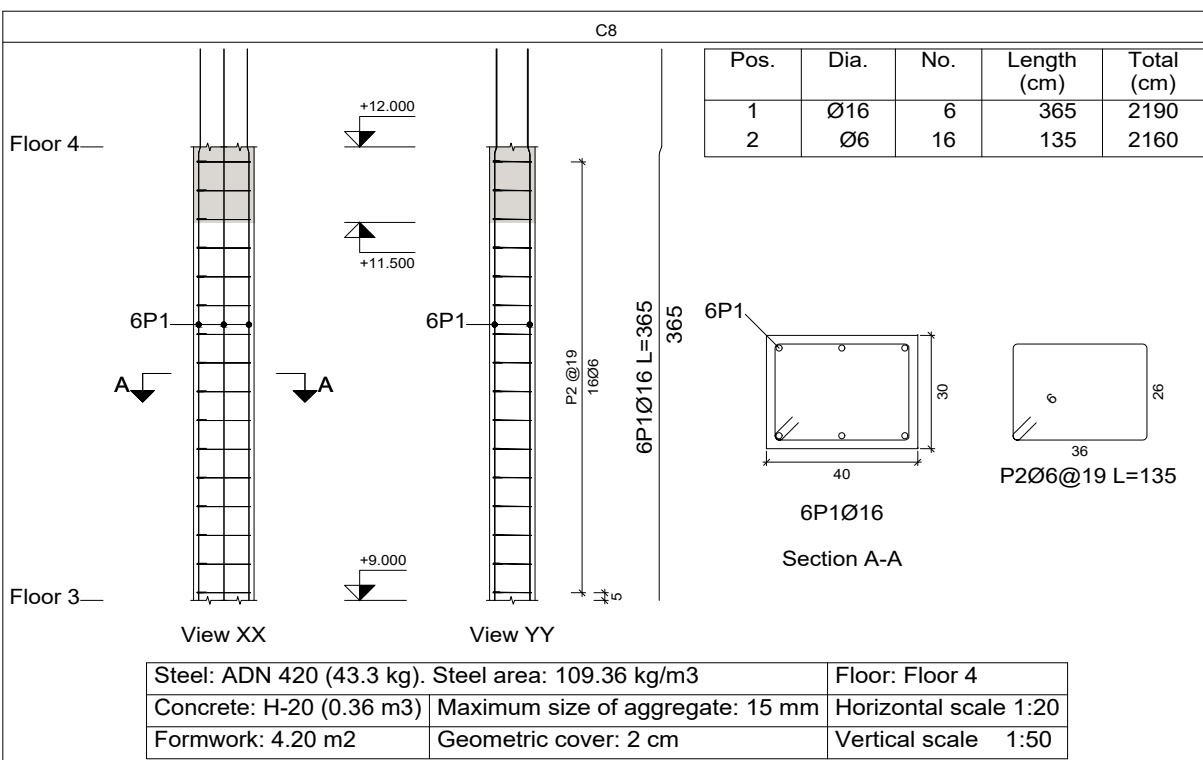
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø16	6		395	2370	37.4
	2	Ø6	16		135	2160	4.8
Total+10%:					46.4		



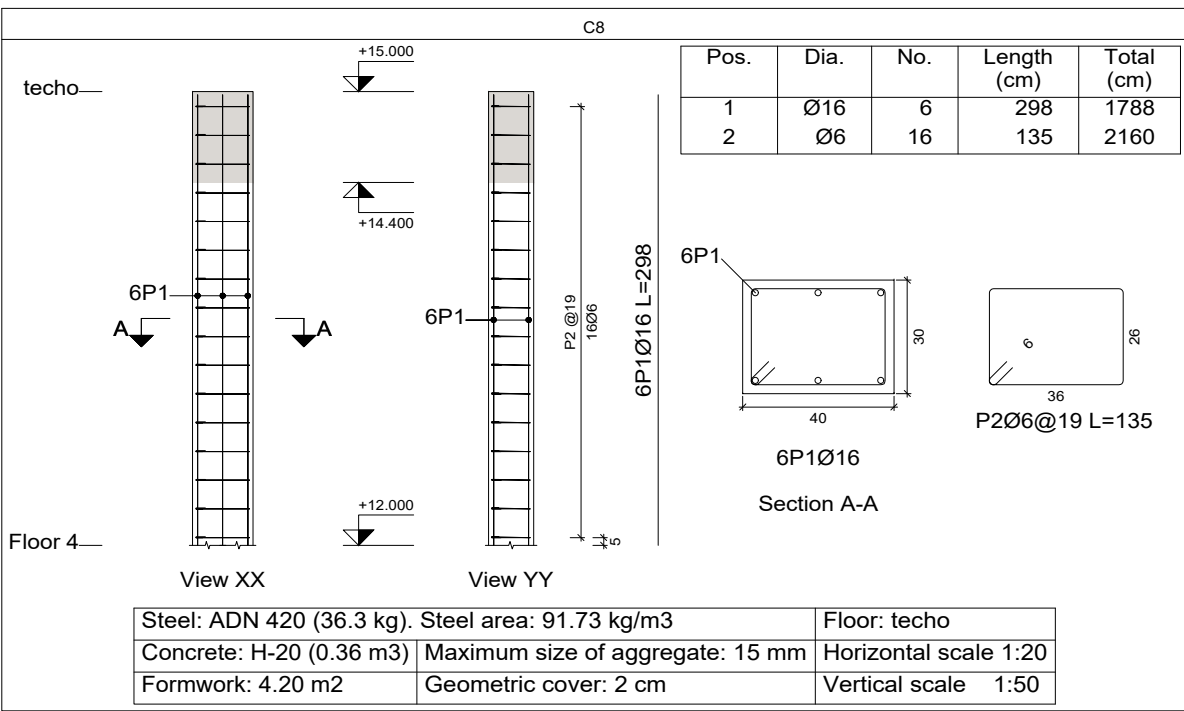
Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø16	6		365	2190	34.6
	2	Ø6	16		135	2160	4.8
Total+10%:					43.3		

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C8	1	Ø16	6		298	1788	28.2
	2	Ø6	16		135	2160	4.8
Total+10%:					36.3		



Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Columna 10

Project number 0001

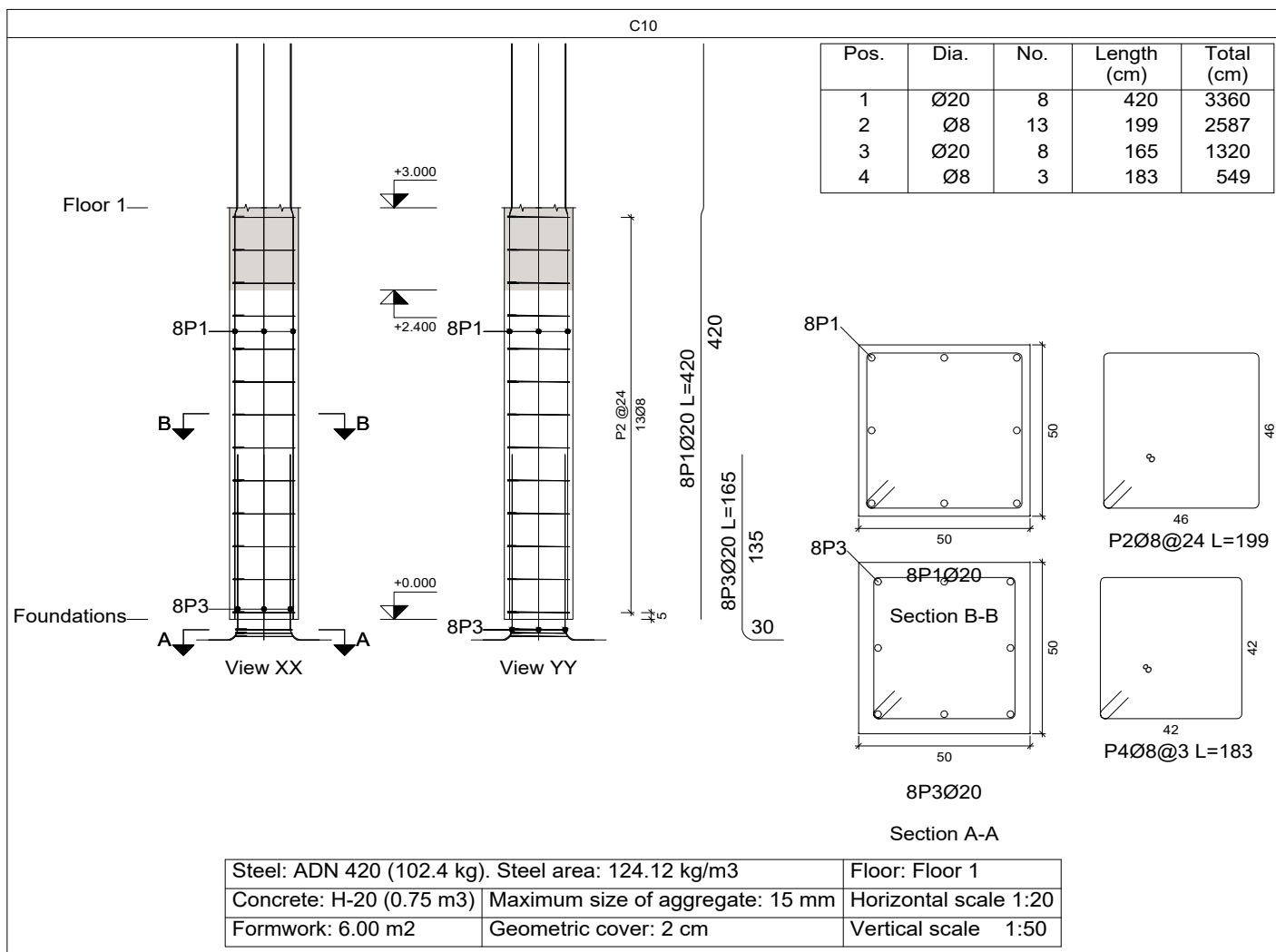
Date 21/10/2020

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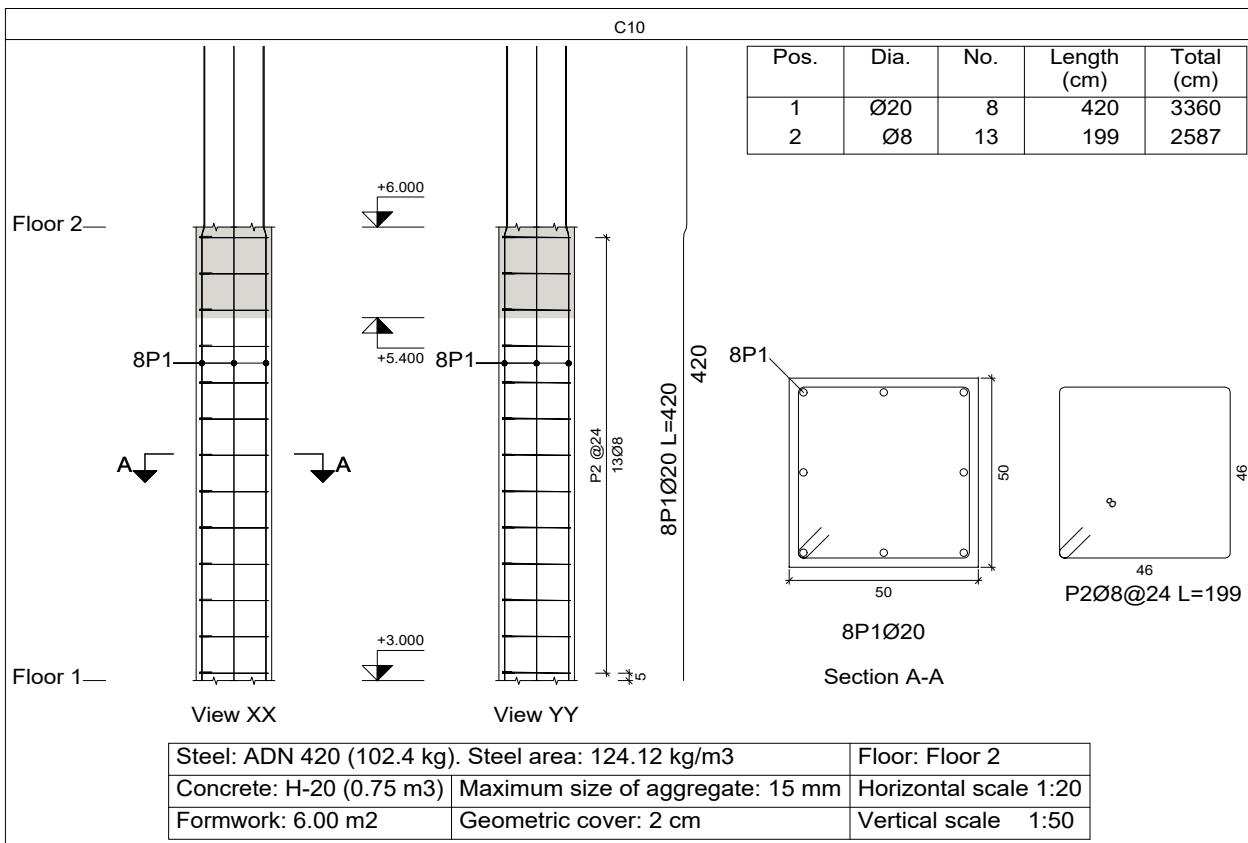
A221

Scale 1 : 50



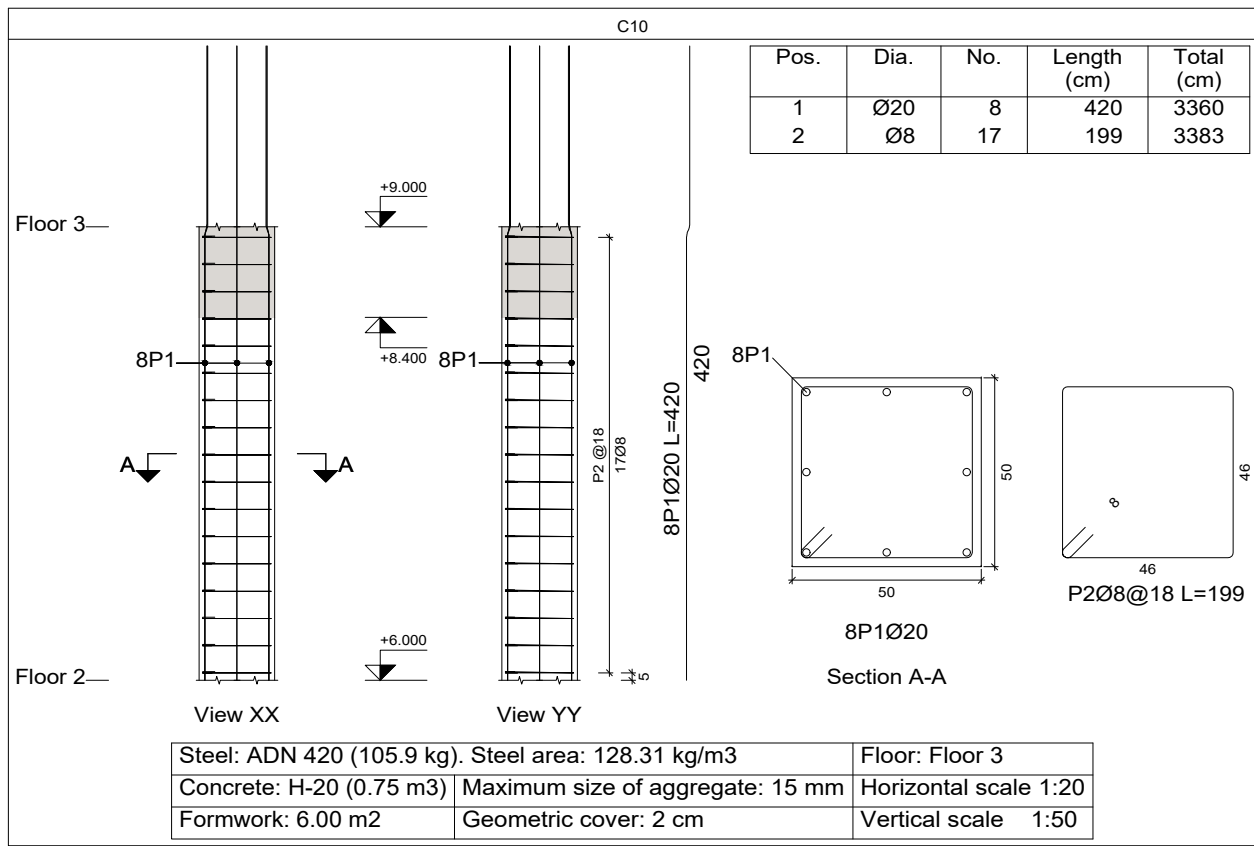
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C10	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46	199	2587	10.2
	3	Ø20	8	135	165	1320	32.6
	4	Ø8	3	42	183	549	2.2
Total+10%:							140.7

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C10	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46	199	2587	10.2
Total+10%:							102.4



Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

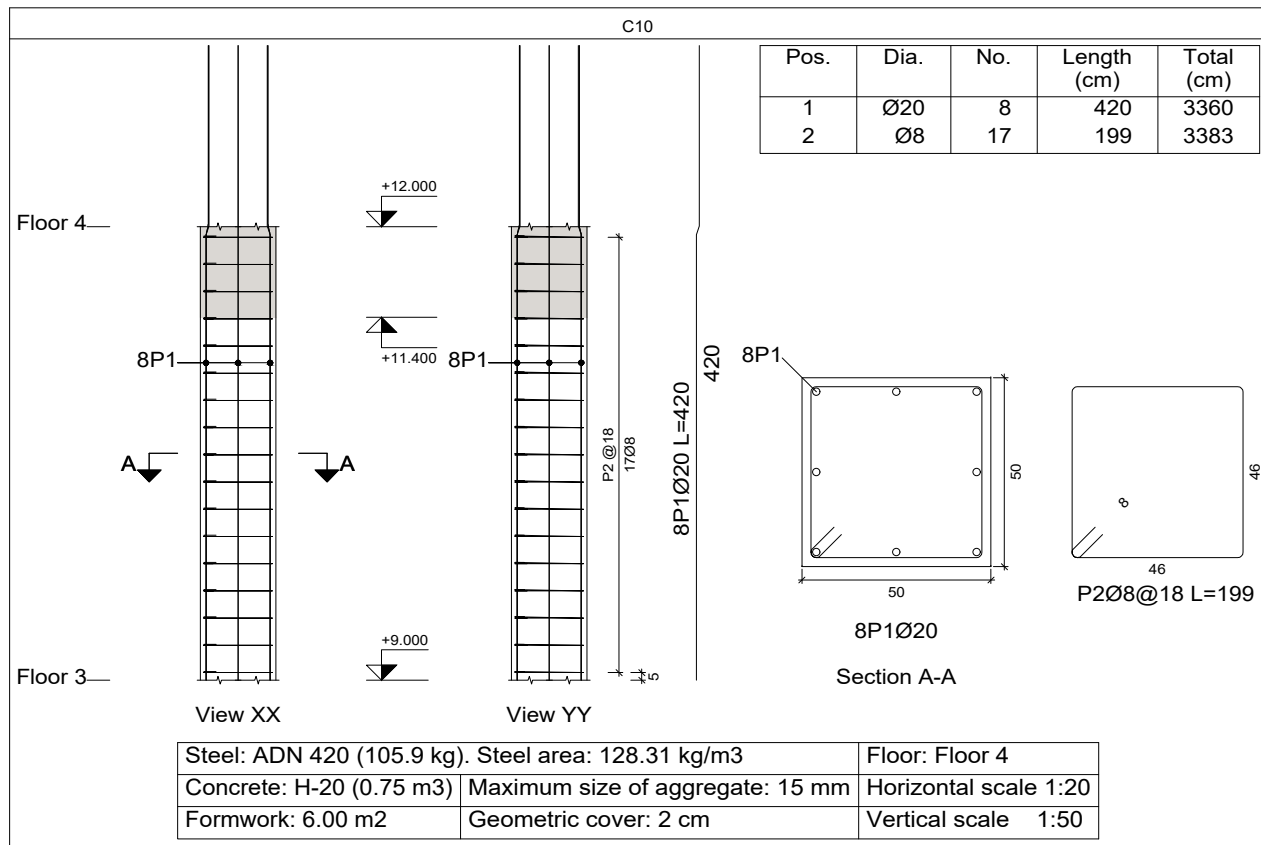
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C10	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	17	46	199	3383	13.4
Total+10%:							105.9



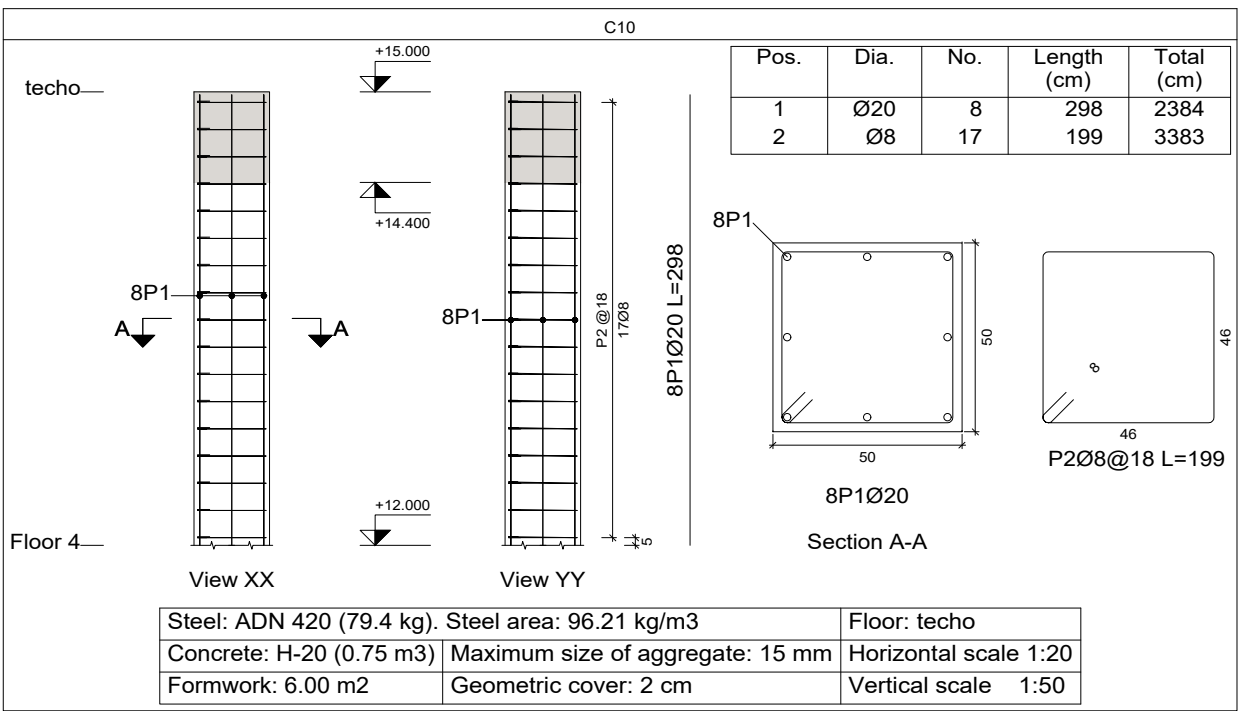
Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C10	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	17	46	199	3383	13.4
Total+10%:							105.9

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C10	1	Ø20	8	295	298	2364	58.8
	2	Ø8	17	46	199	3383	13.4
Total+10%:							79.4



Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Trabajo Final:

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Cordoba

Columna 11

Project number0001

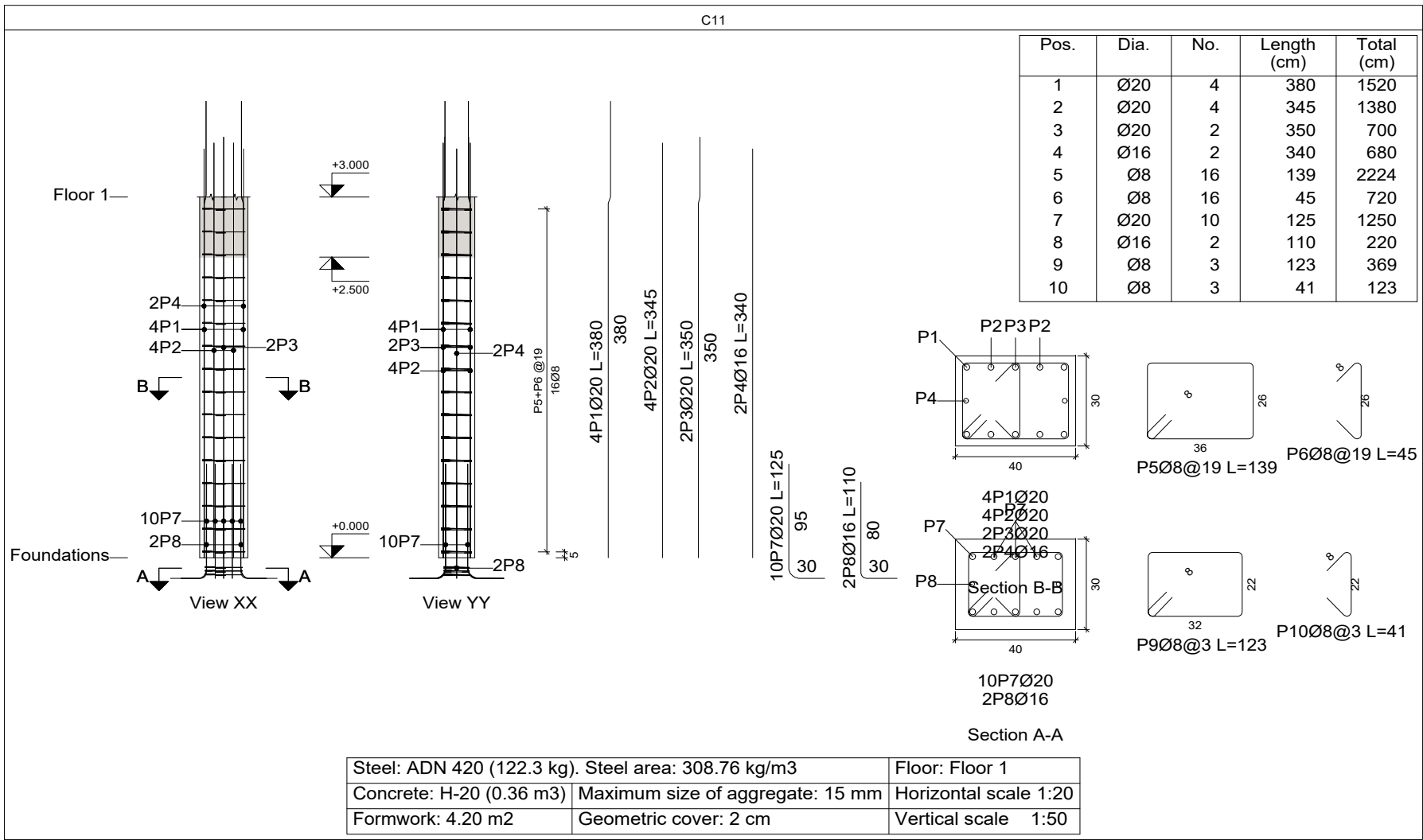
Date21/10/2020

Drawn by

Checked by

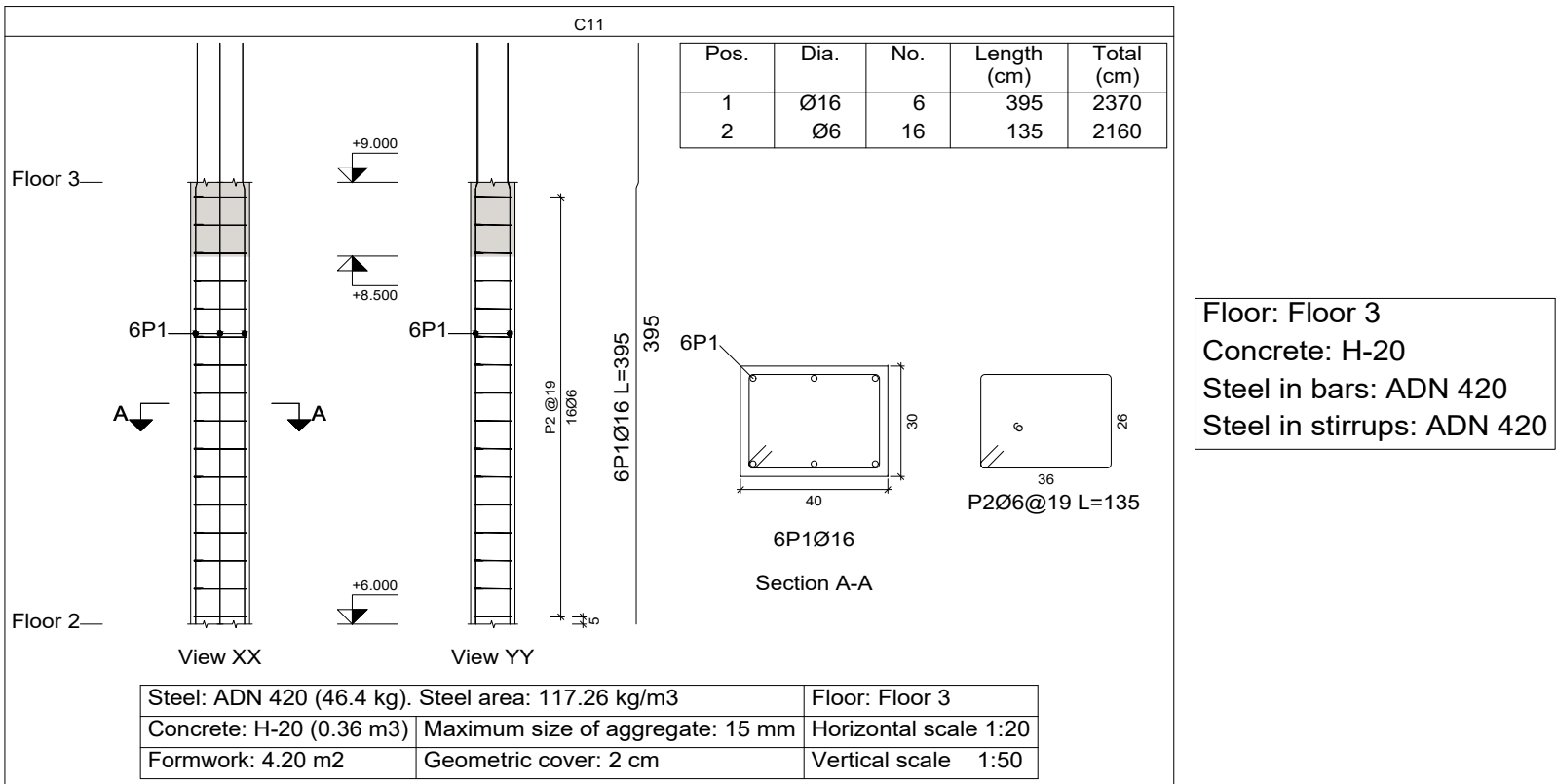
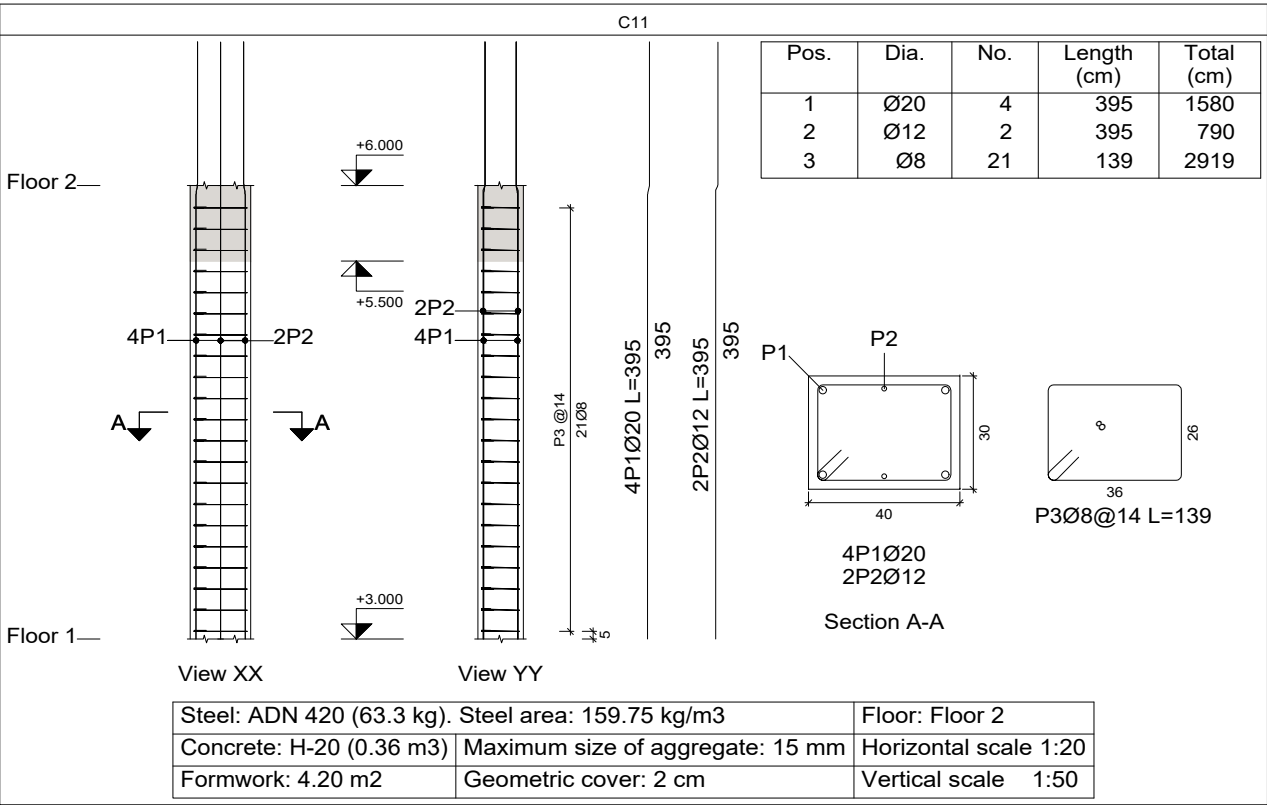
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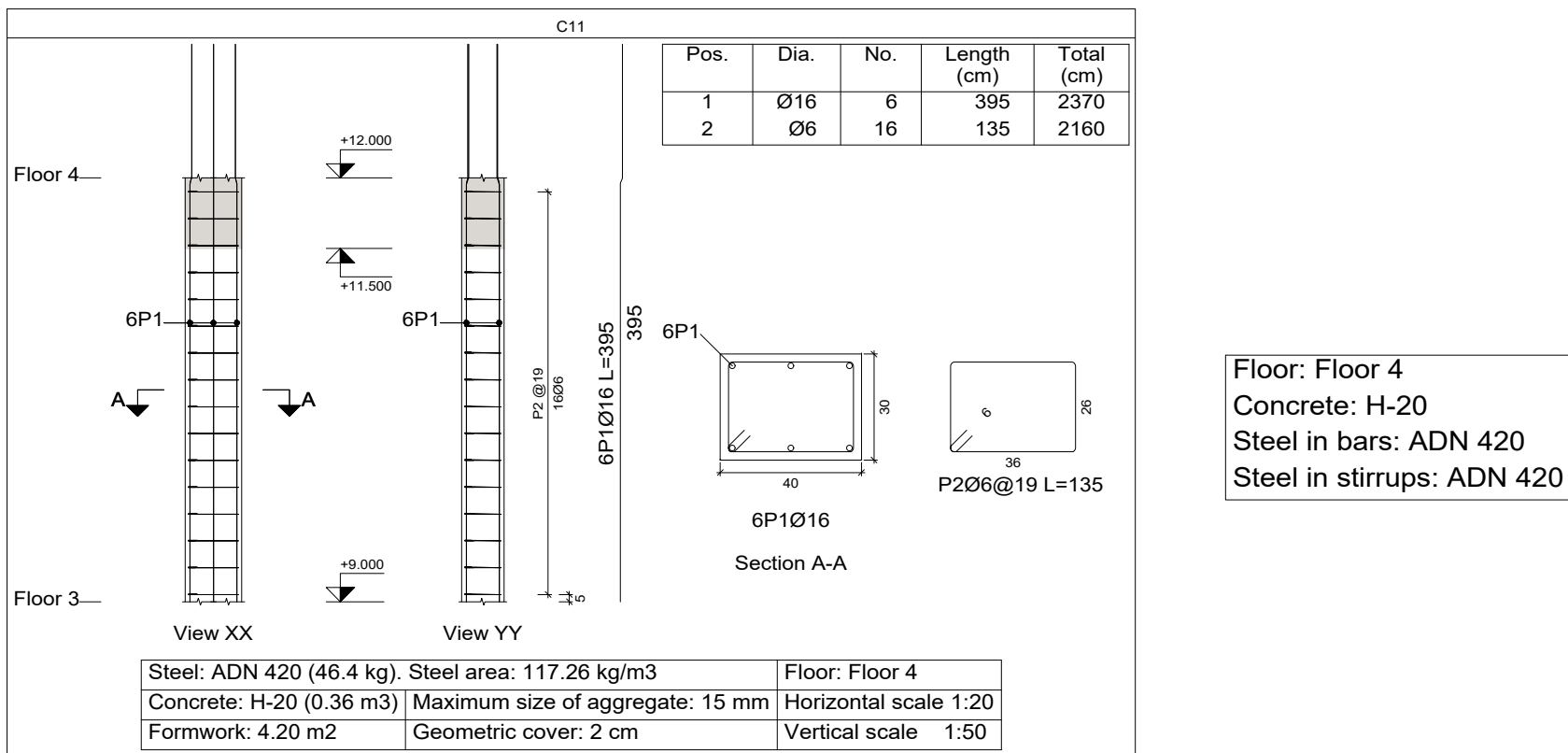


Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C11	1	Ø20	4		380	1520	37.5
	2	Ø20	4		345	1380	34.0
	3	Ø20	2		350	700	17.3
	4	Ø16	2		340	680	10.7
	5	Ø8	16		139	2224	8.8
	6	Ø8	16		45	720	2.8
	7	Ø20	10		125	1250	30.8
	8	Ø16	2		110	220	3.5
	9	Ø8	3		123	369	1.5
	10	Ø8	3		41	123	0.5
Total+10%:							162.1

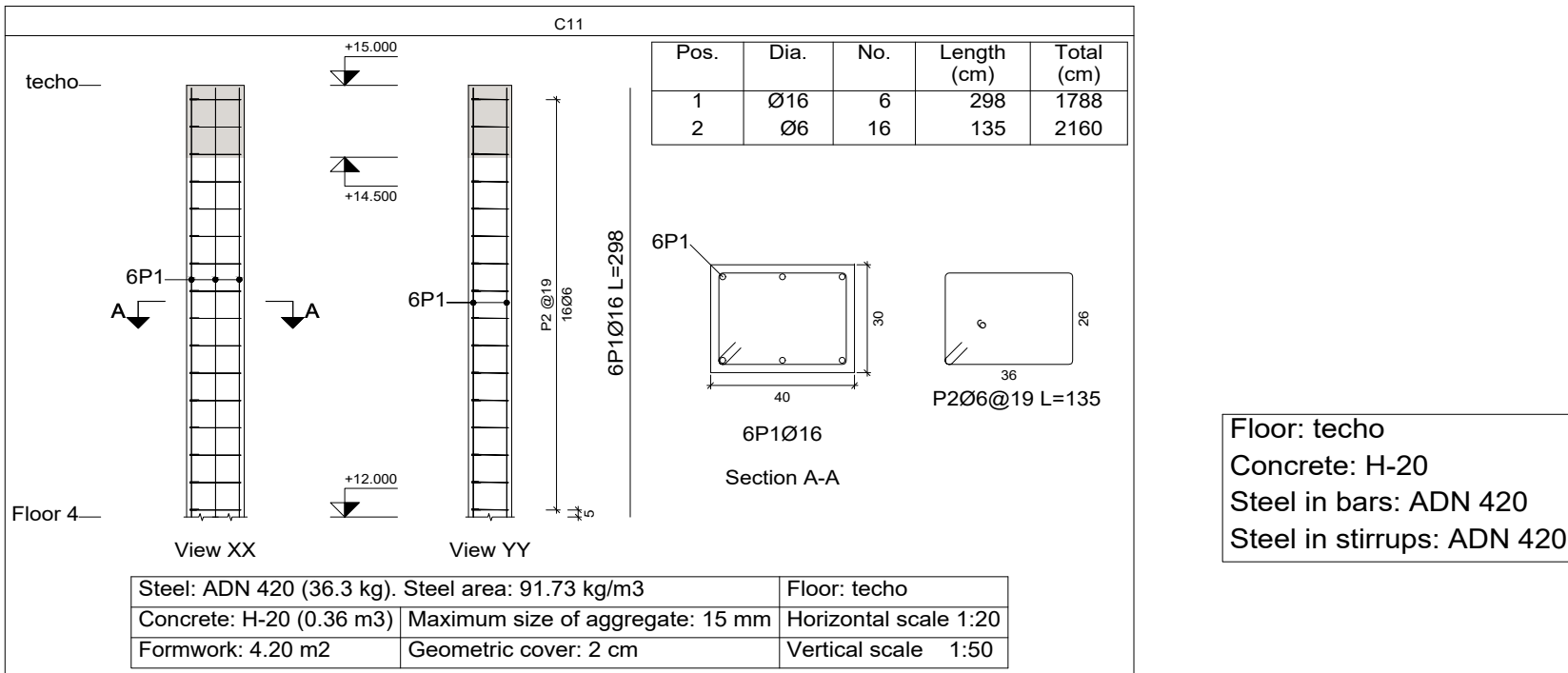
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C11	1	Ø20	4		380	1520	39.0
	2	Ø12	2		287	574	7.0
	3	Ø8	21		139	2919	11.5
Total+10%:							63.3



Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C11	1	Ø16	6		395	2370	37.4
	2	Ø6	16		135	2160	4.8
	Total+10%:						46.4



Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C11	1	Ø16	6		298	1788	28.2
	2	Ø6	16		135	2160	4.8
	Total+10%:						36.3



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Trabajo Final:
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Universidad Catolica de Cordoba

Columna 18

Project number 0001

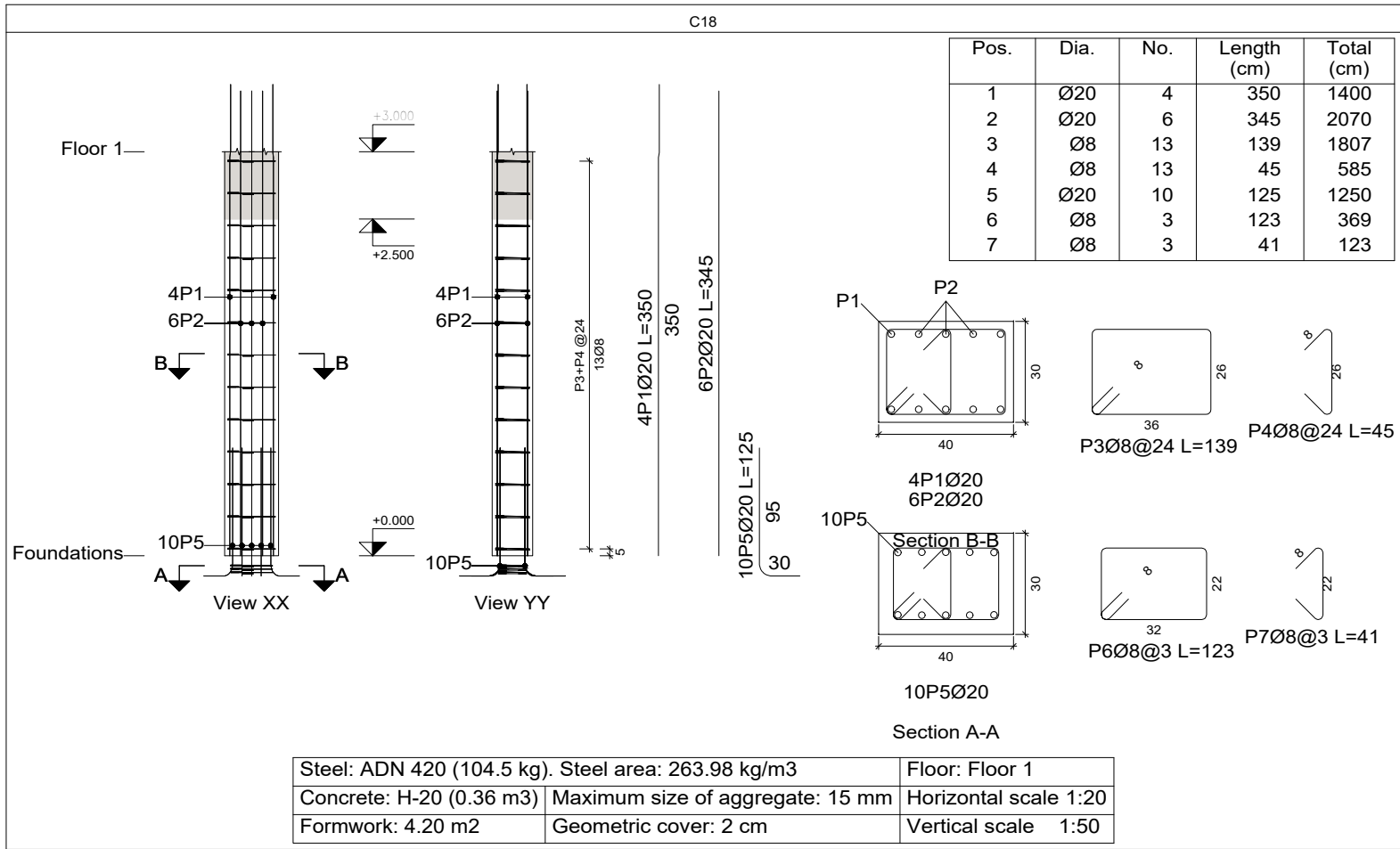
Date 21/10/2020

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Checked by

A223

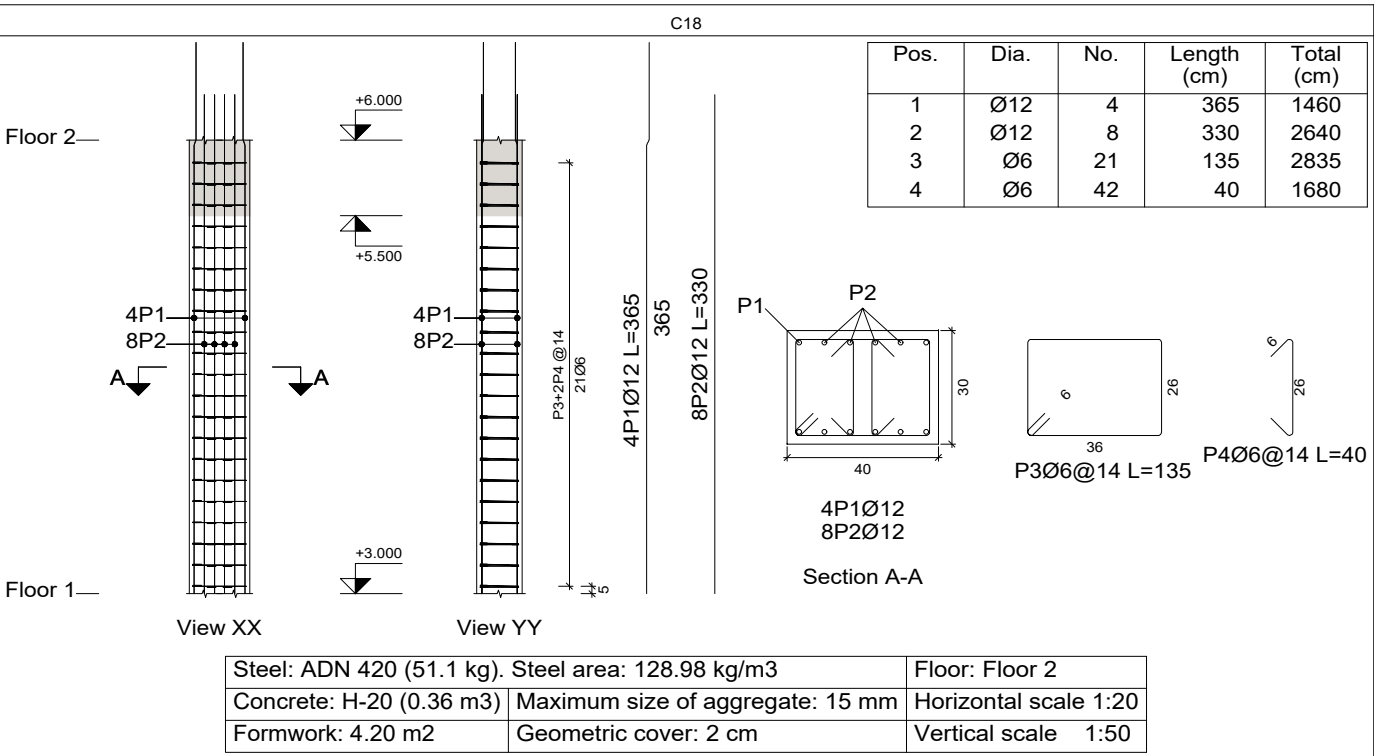
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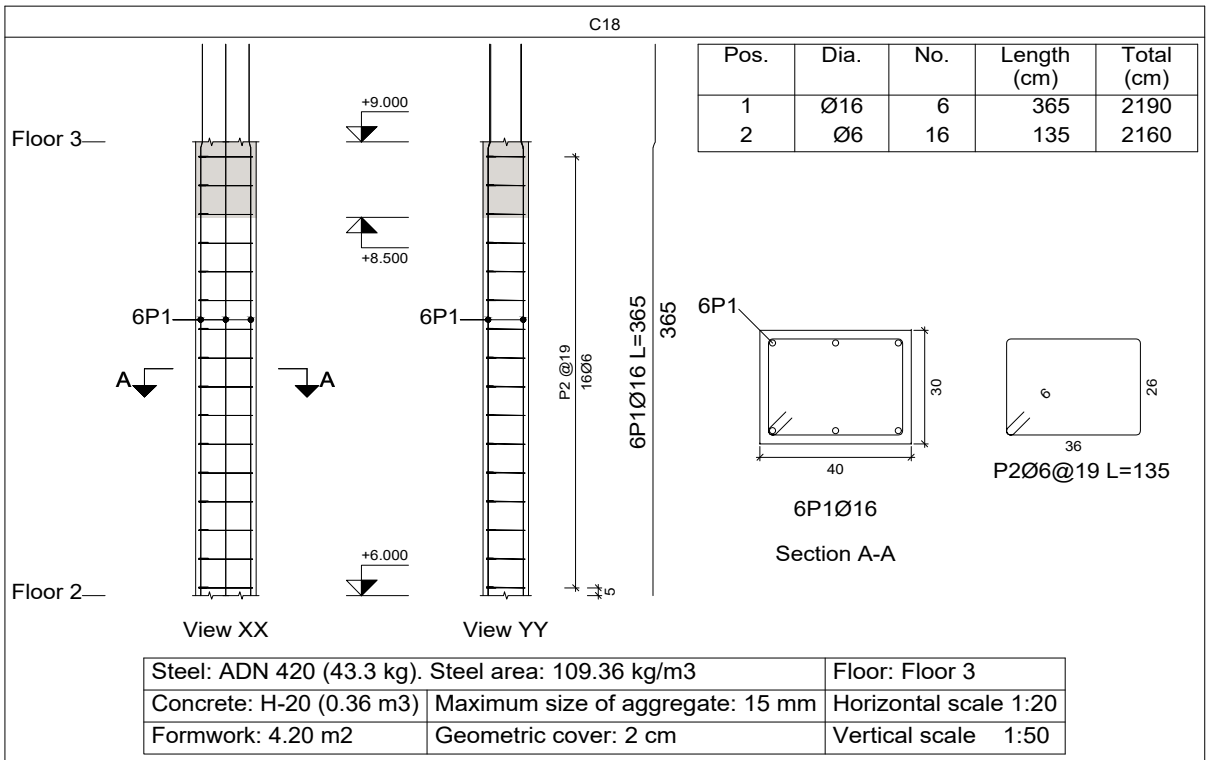
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C18	1	Ø20	4		350	1400	34.5
	2	Ø20	6		345	2070	51.1
	3	Ø8	13		139	1807	7.1
	4	Ø8	13		45	585	2.3
	5	Ø20	10		125	1250	30.8
	6	Ø8	3		123	369	1.5
	7	Ø8	3		41	123	0.5
Total+10%:					140.6		

Floor: Floor 1
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C18	1	Ø12	4		365	1460	13.0
	2	Ø12	8		330	2640	23.4
	3	Ø6	21		135	2835	6.3
	4	Ø6	42		40	1680	3.7
Total+10%:					51.0		

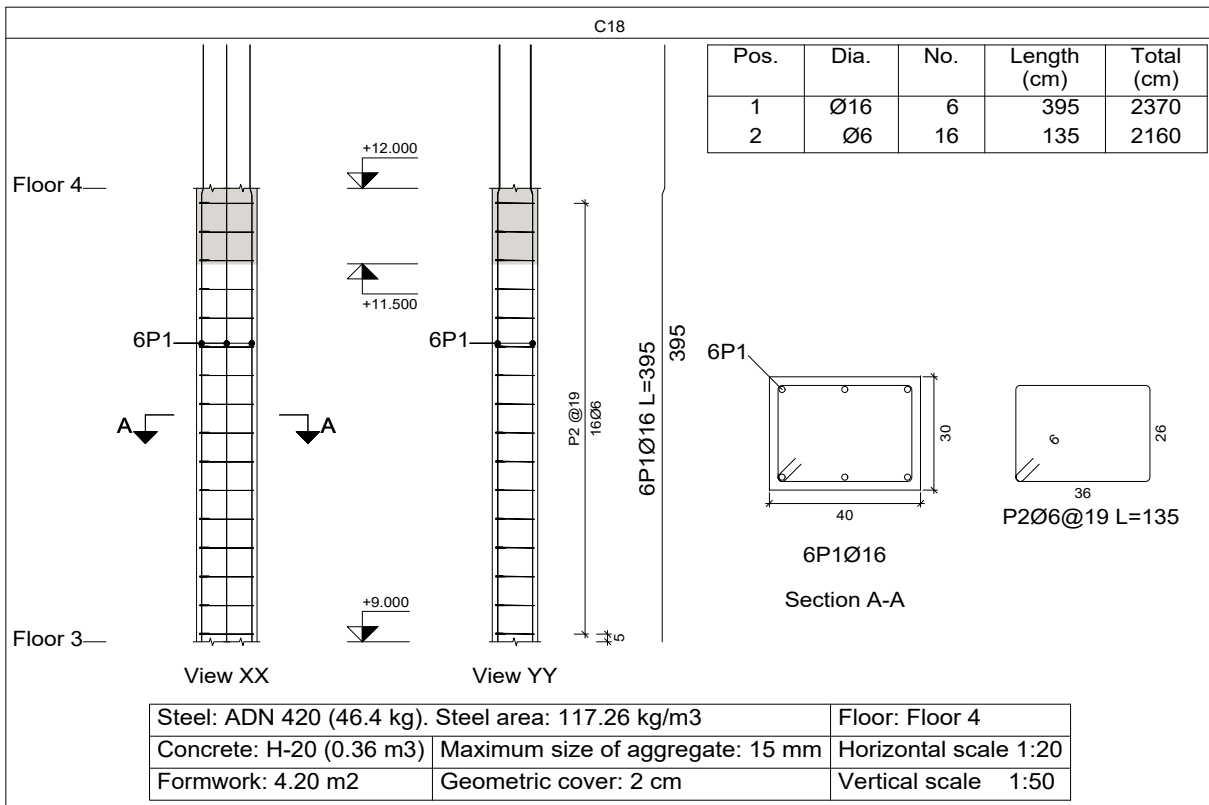


Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

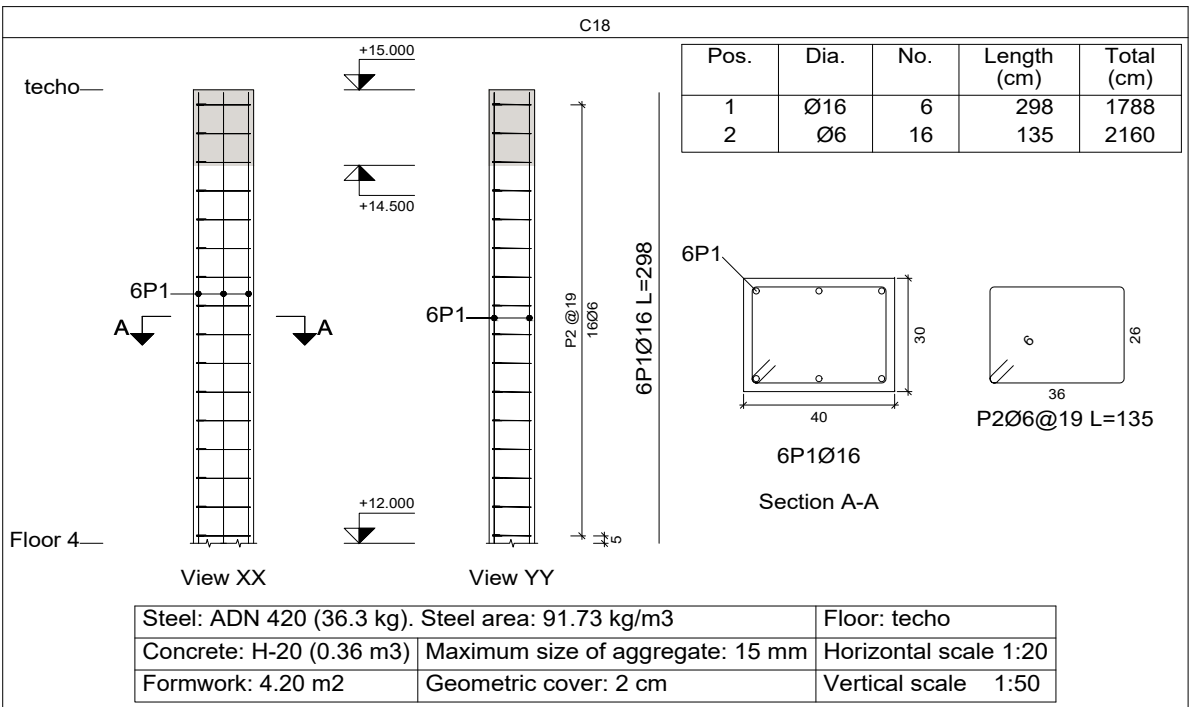


Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C18	1	Ø16	6		365	2190	34.6
	2	Ø6	16		135	2160	4.8
Total+10%:					43.3		



Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Trabajo Final: Polo-Tecnologico, Master Plan

Universidad Catolica de Cordoba

Columna 21

Project number 0001

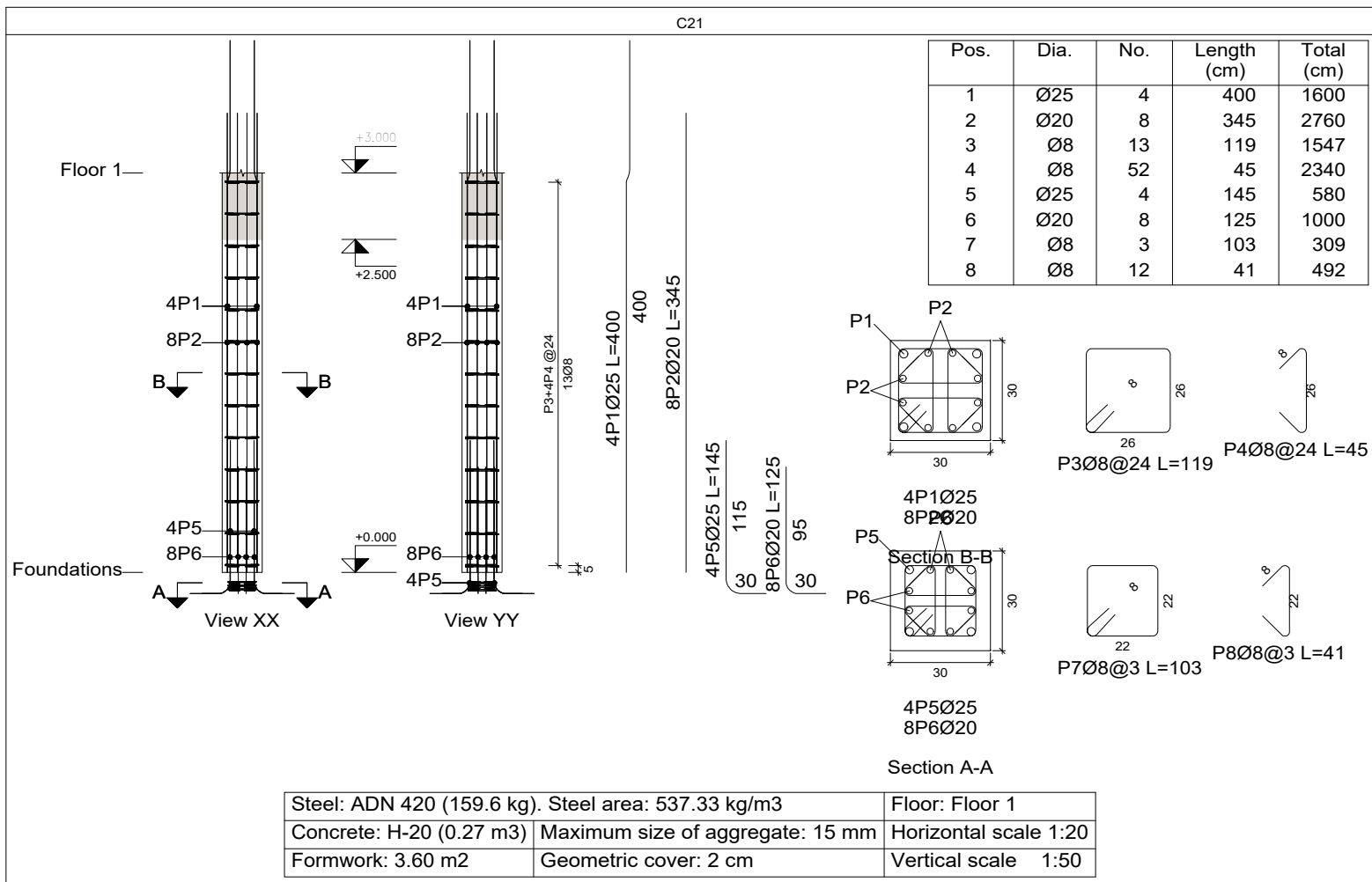
Date 21/10/2020

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A224

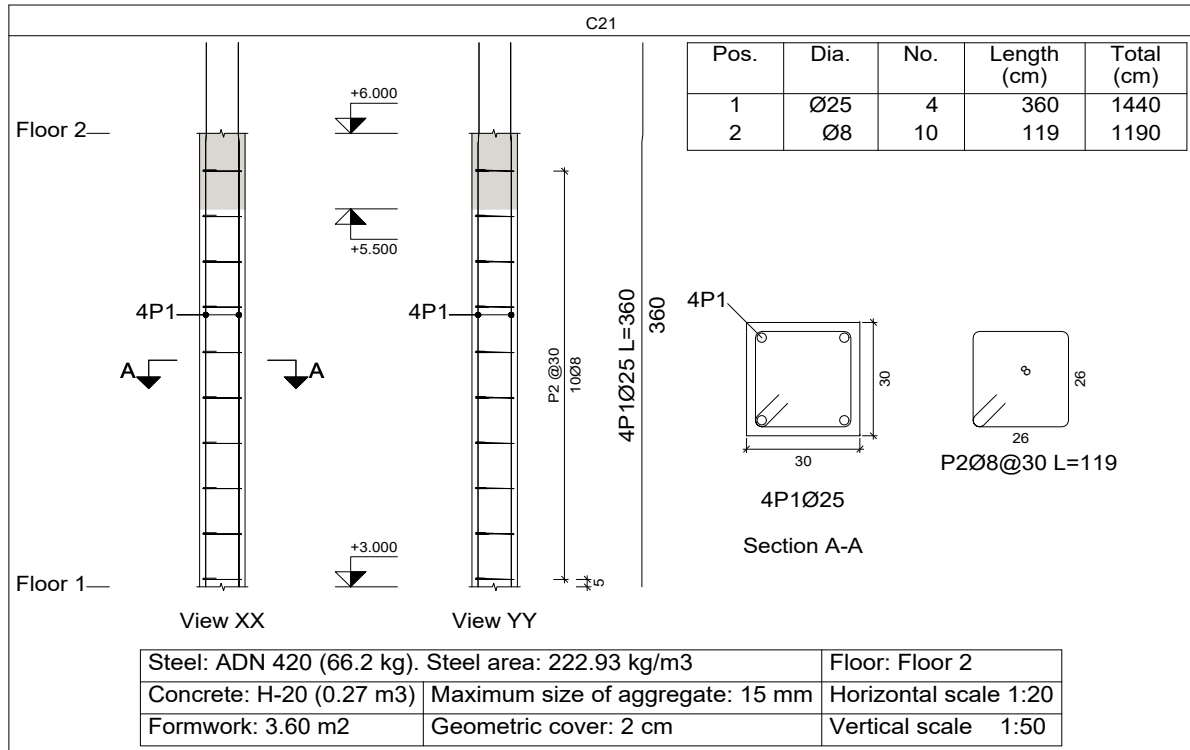
Scale 1 : 50



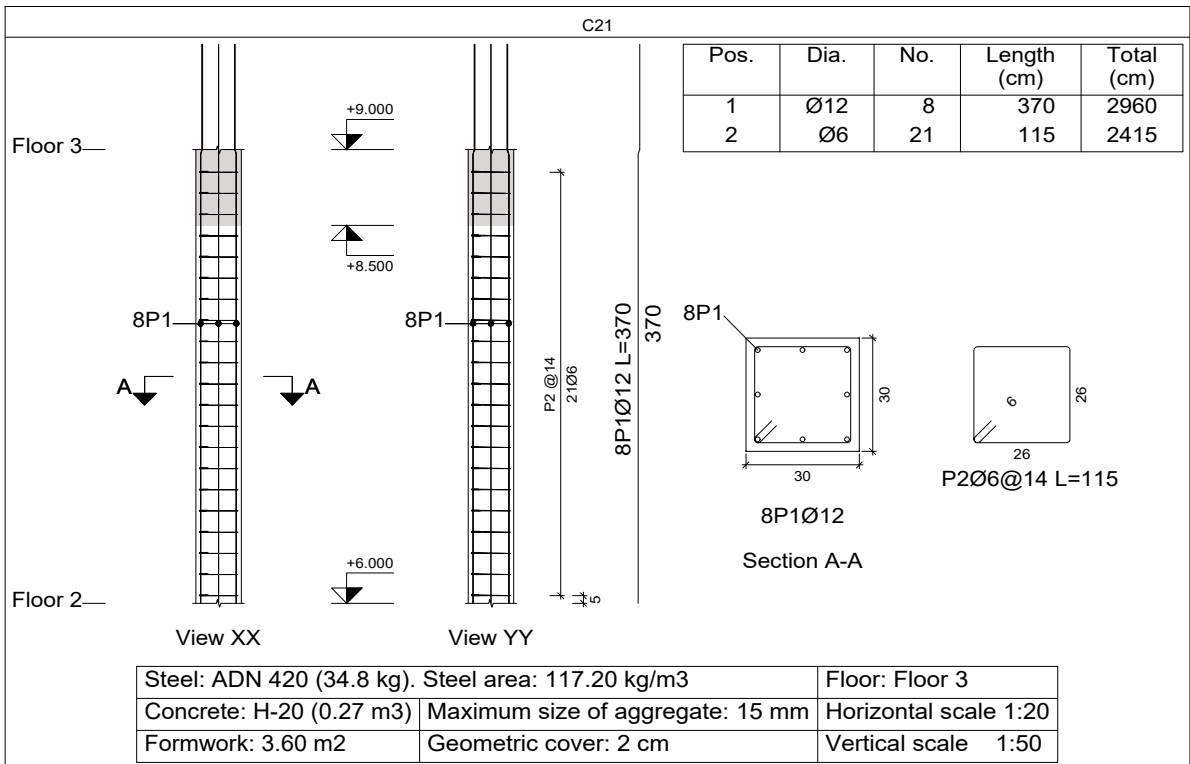
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C21	1	Ø25	4	294 100	400	1600	61.7
	2	Ø20	8	345	345	2760	68.1
	3	Ø8	13	8 26	119	1547	6.1
	4	Ø8	52	8 26	45	2340	9.2
	5	Ø25	4	8 115	145	580	22.4
	6	Ø20	8	8 95	125	1000	24.7
	7	Ø8	3	8 22	103	309	1.2
	8	Ø8	12	8 22	41	492	1.9
Total+10%:							214.8

Floor: Floor 1
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C21	1	Ø25	4	294 60	360	1440	55.5
	2	Ø8	10	8 26	110	1100	4.7
Total+10%:							66.2
Ø8:							5.1
Ø25:							61.1
Total:							66.2

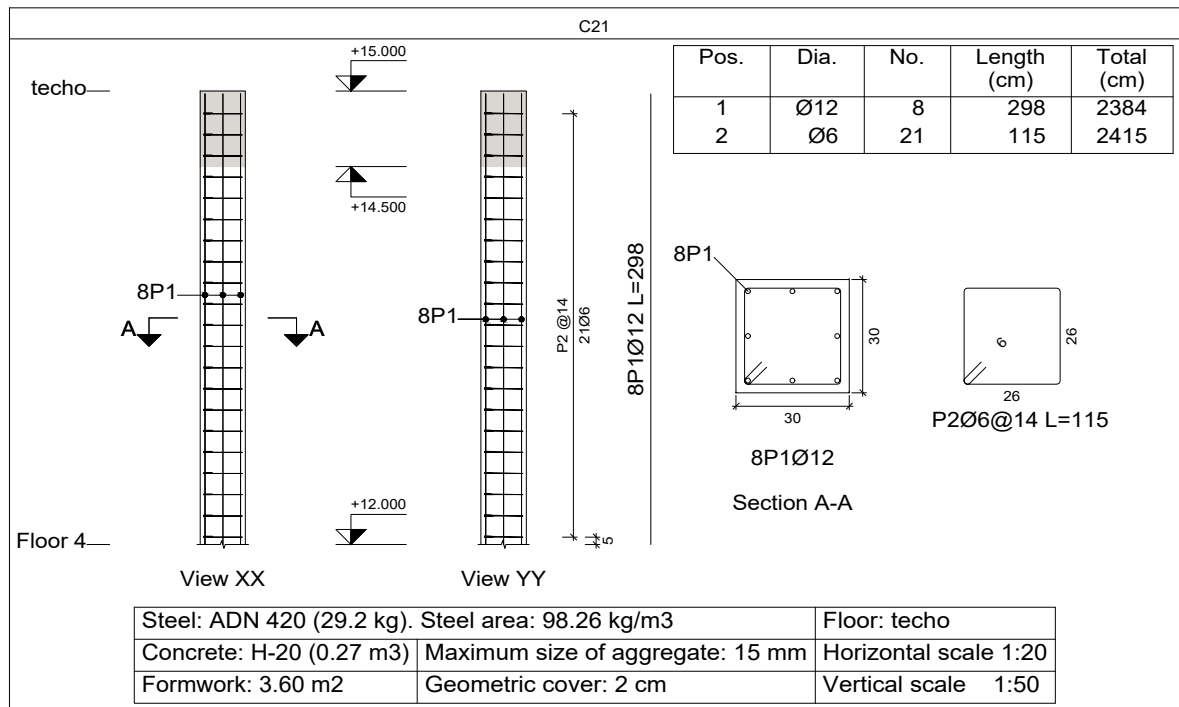


Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

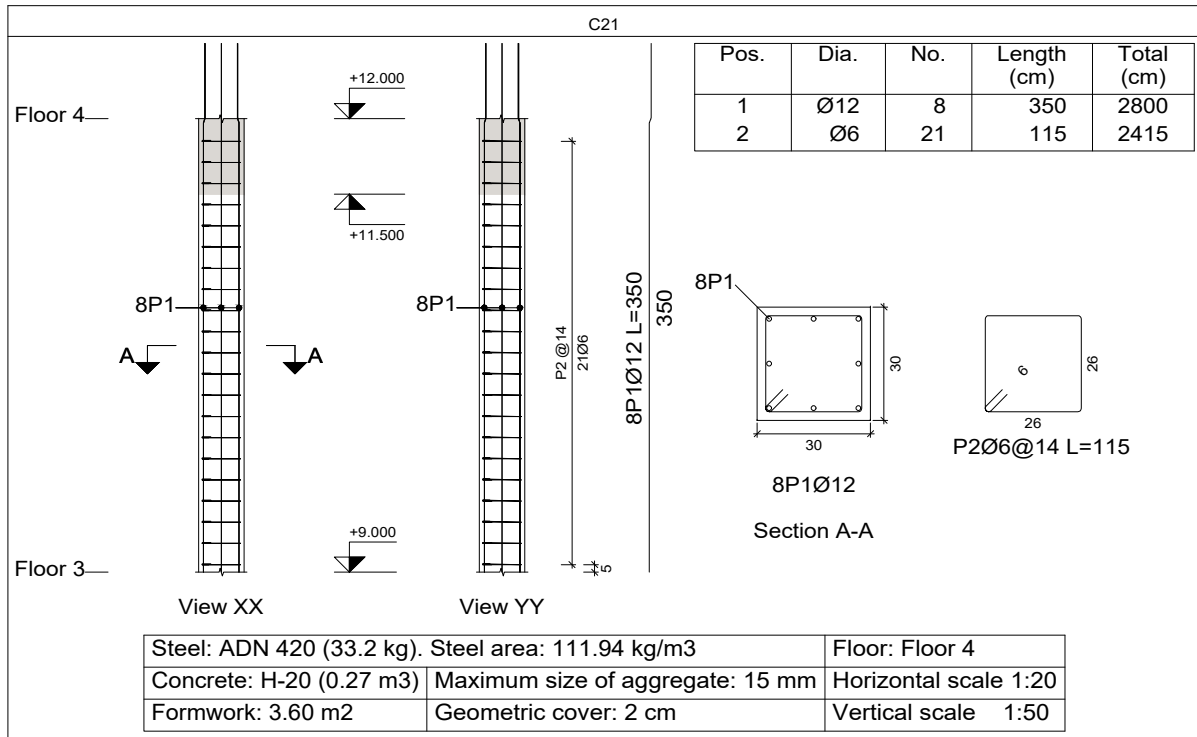


Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C21	1	Ø12	8	298	298	2384	21.2
	2	Ø6	21	8 26	115	2415	5.4
Total+10%:							29.3



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Trabajo Final:
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Tecnologico,
Master Plan

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Columnas
7-9-12-13-15-25-17

Project number 0001

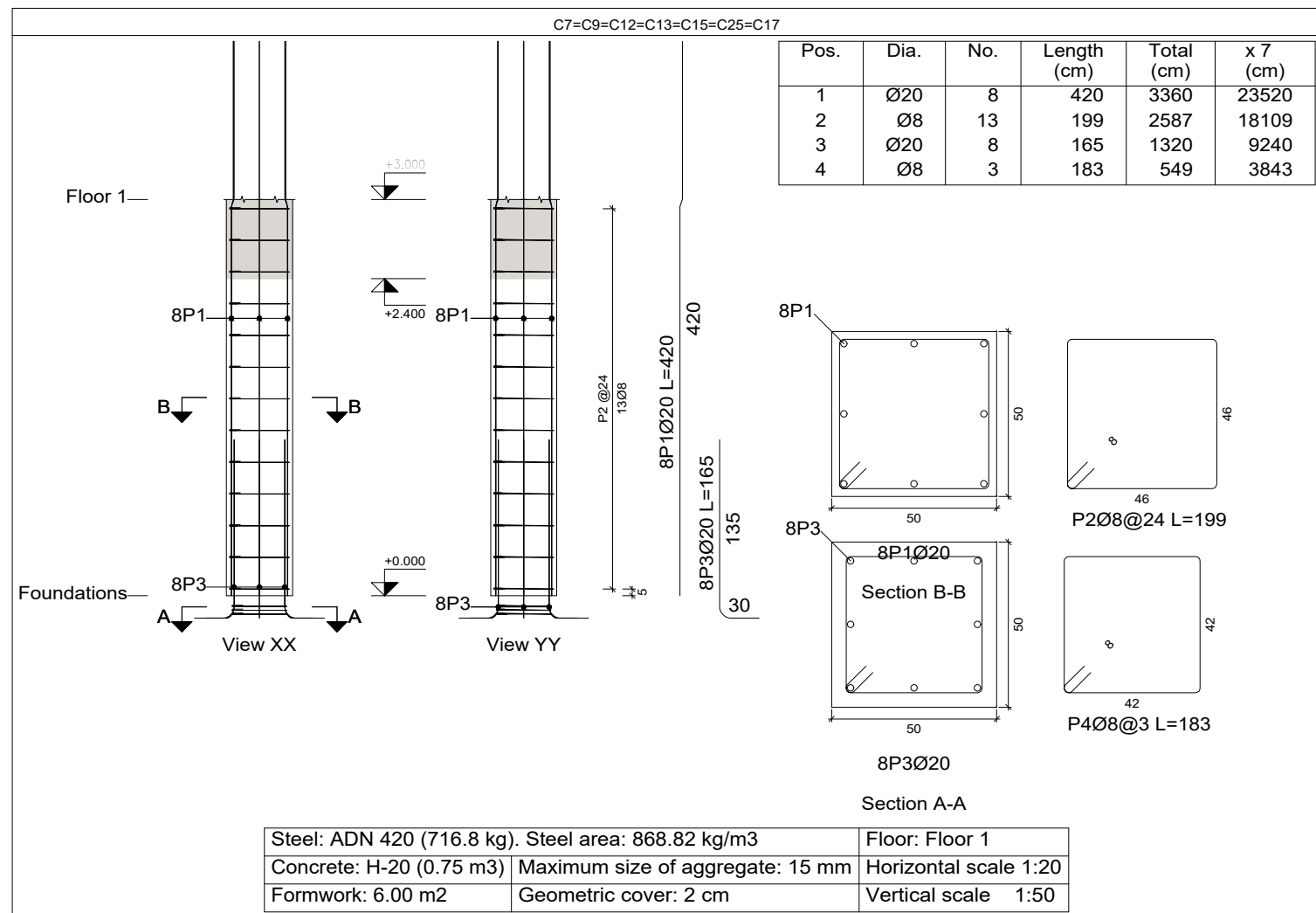
Date 21/10/2020

Drawn by

Checked by

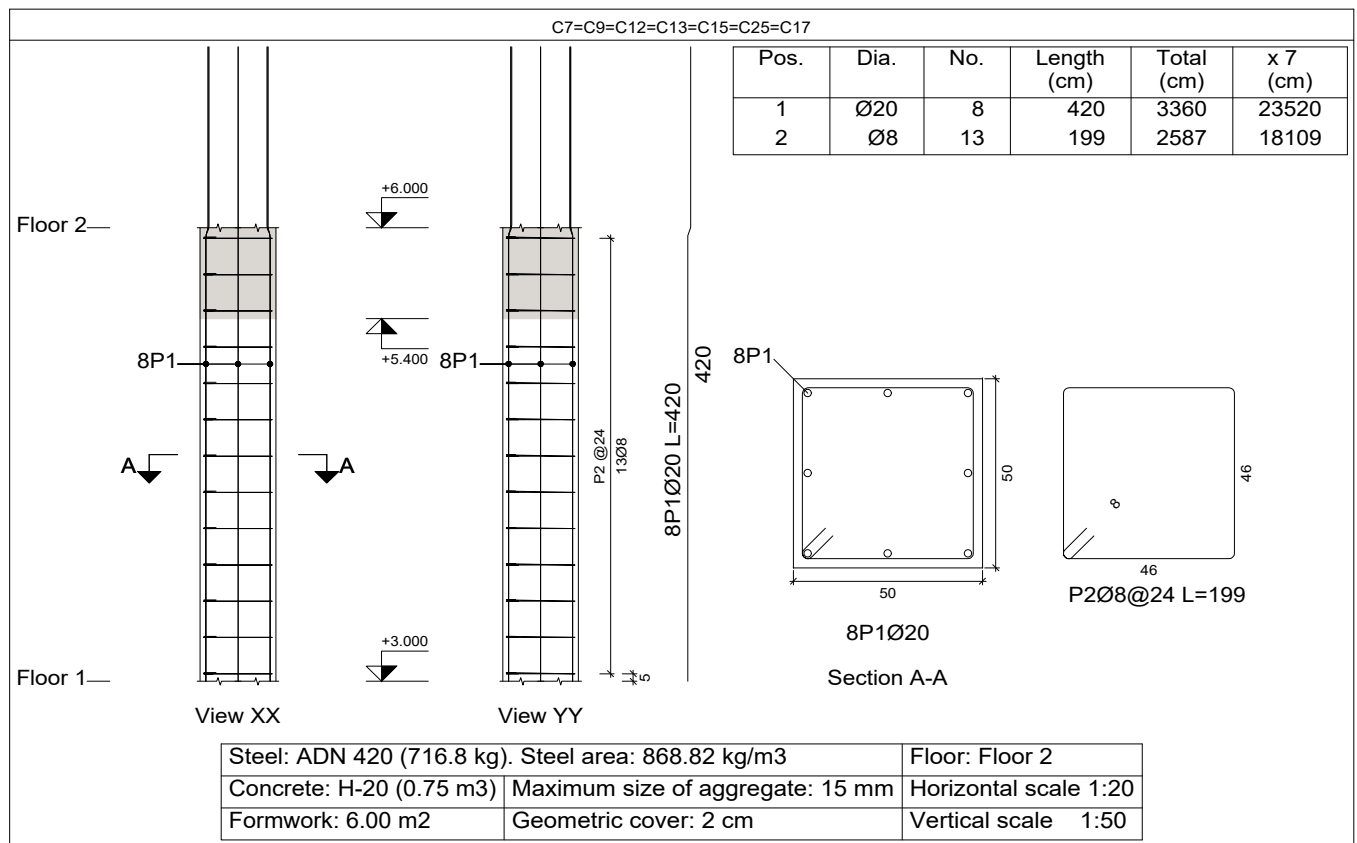
A225

Scale 1 : 50

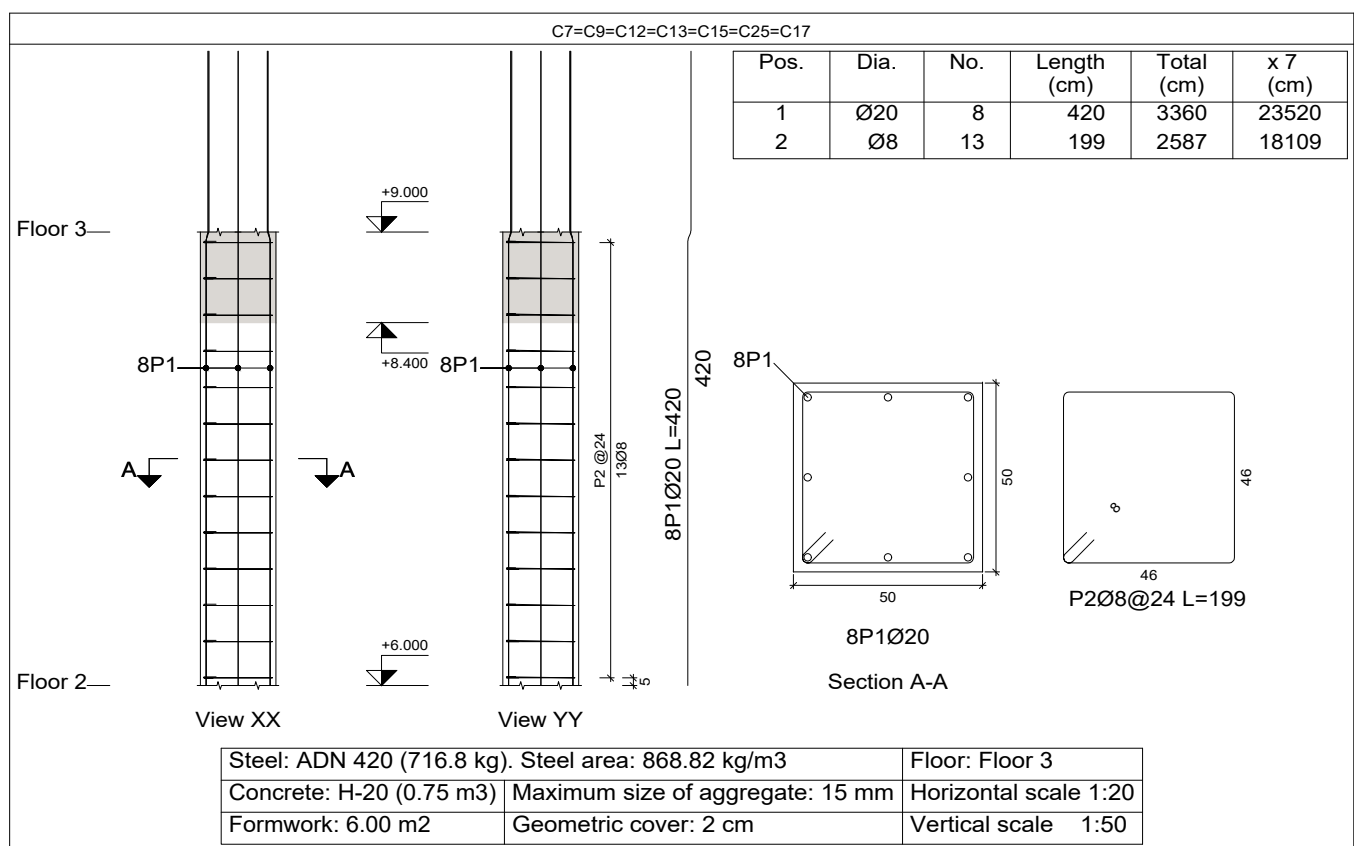


Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C7=C9+C12=C13=C15=C25=C17	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46 8	199	2587	10.2
	3	Ø20	8	135 42	165	1320	32.6
	4	Ø8	3	42 8	183	549	2.2
Total+10% (x7)					140.7	884.9	

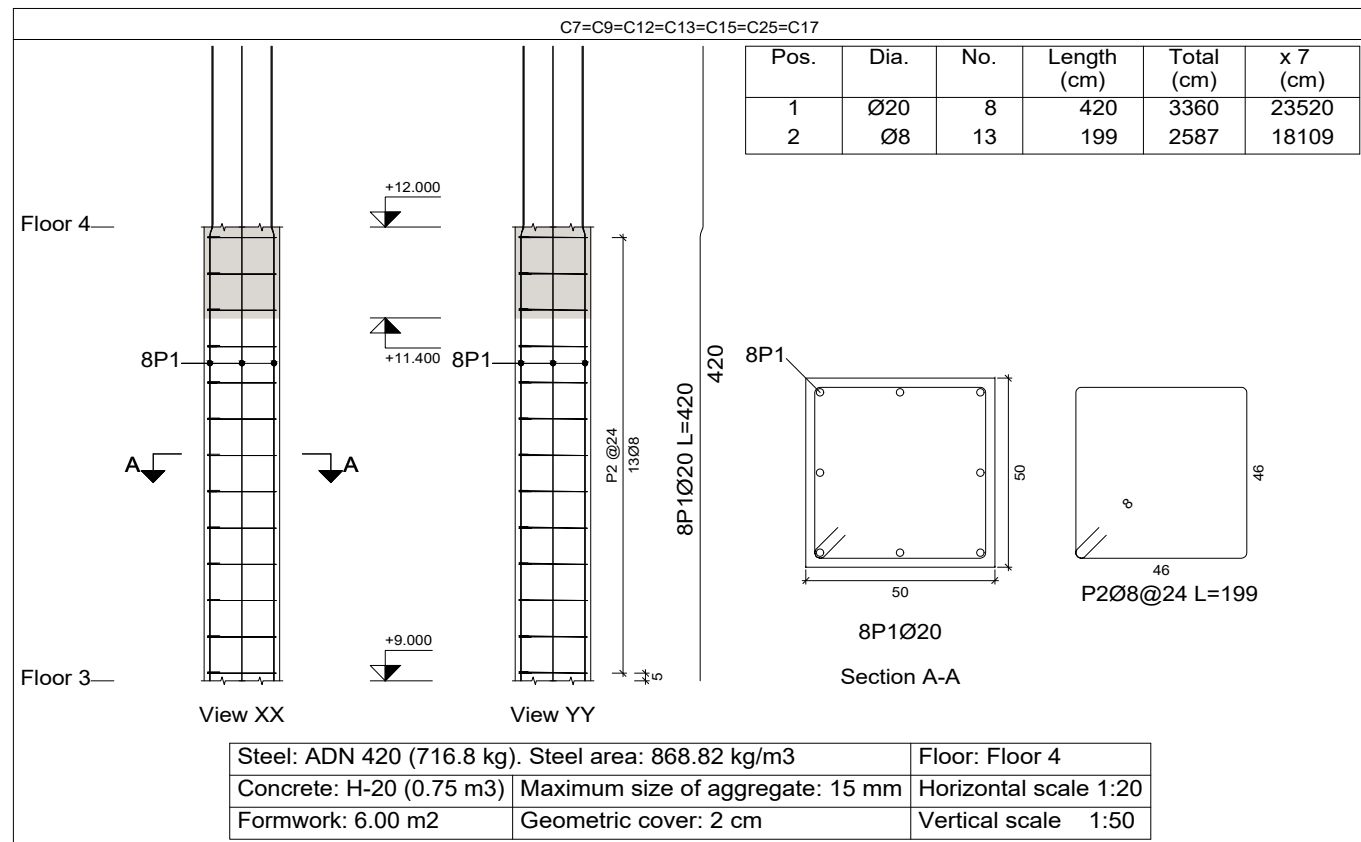
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C7=C9+C12=C13=C15=C25=C17	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46 8	199	2587	10.2
Total+10% (x7)					102.4	716.8	



Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C7=C9+C12=C13=C15=C25=C17	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46 8	199	2587	10.2
Total+10% (x7)					102.4	716.8	

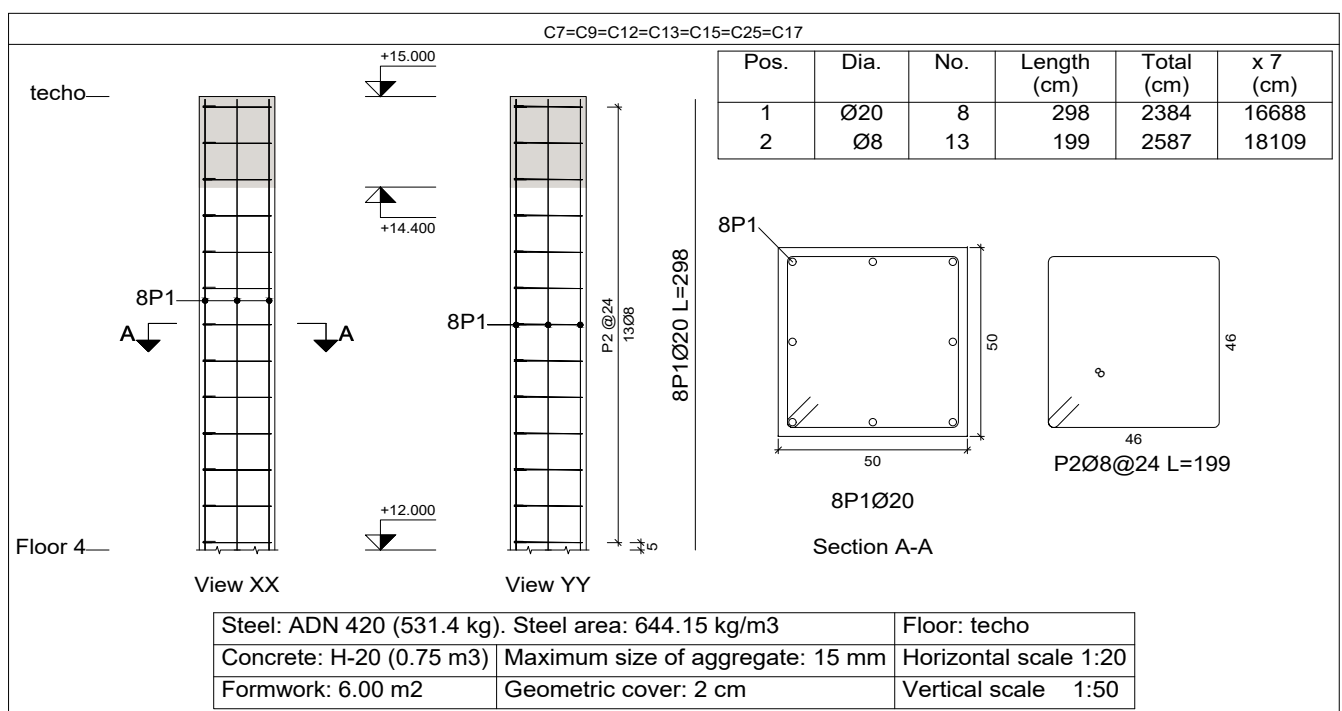


Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C7=C9+C12=C13=C15=C25=C17	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46 8	199	2587	10.2
Total+10% (x7)					102.4	716.8	



Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C7=C9+C12=C13=C15=C25=C17	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46 8	199	2587	10.2
Total+10% (x7)					75.9	531.3	



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Trabajo Final: Polo- Tecnologico, Master Plan

Universidad
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Columnas
16-19-23

Project number 0001

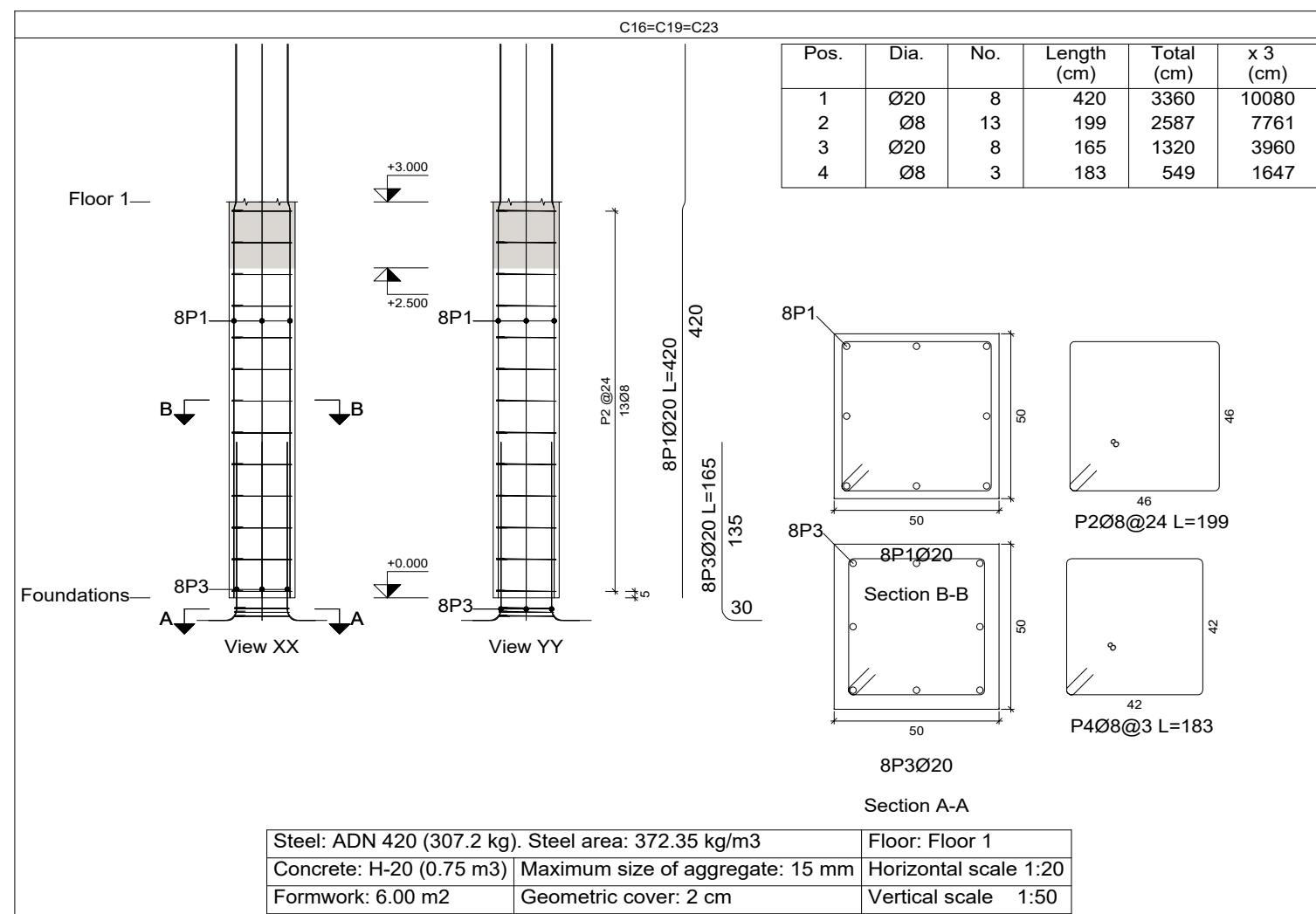
Date 21/10/2020

Drawn by

Checked by

A226

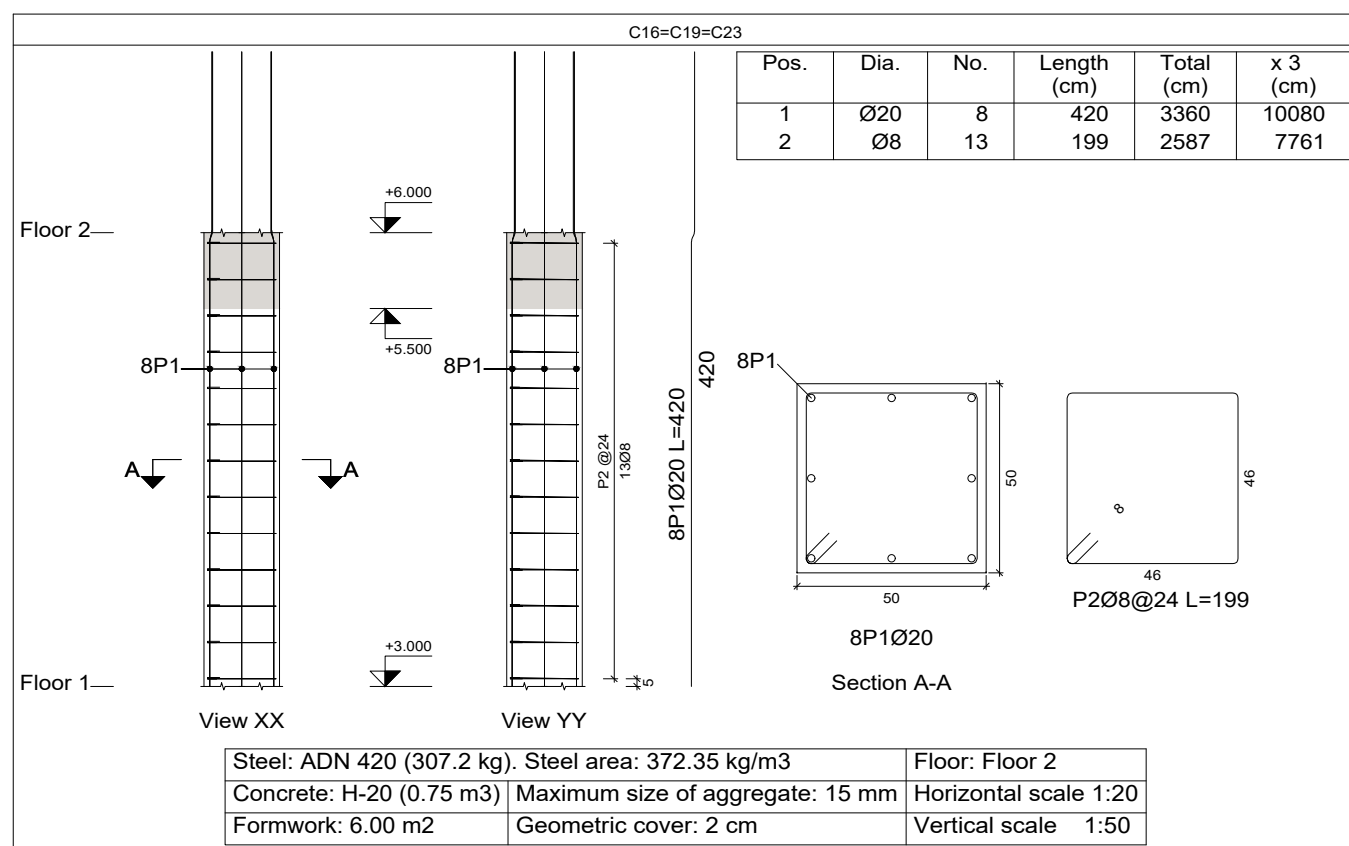
Scale 1 : 50



Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C16=C19=C23	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46 8	199	2587	10.2
	3	Ø20	8	135 42	165	1320	32.6
	4	Ø8	3	42 8	183	549	2.2
					Total+10% (x3)	140.7	422.1

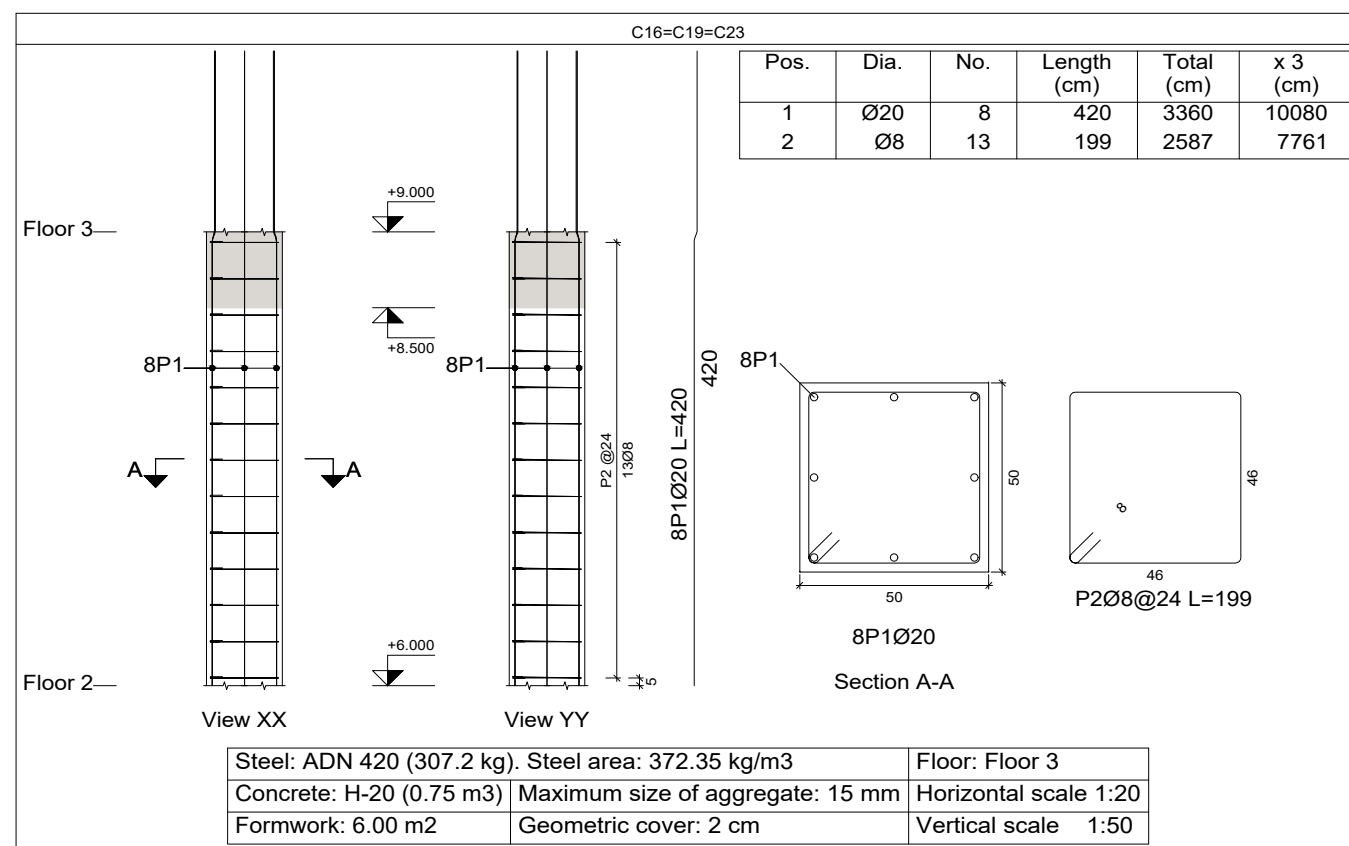
Floor: Floor 1
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C16=C19=C23	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46 8	199	2587	10.2
					Total+10% (x3)	102.4	307.2



Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

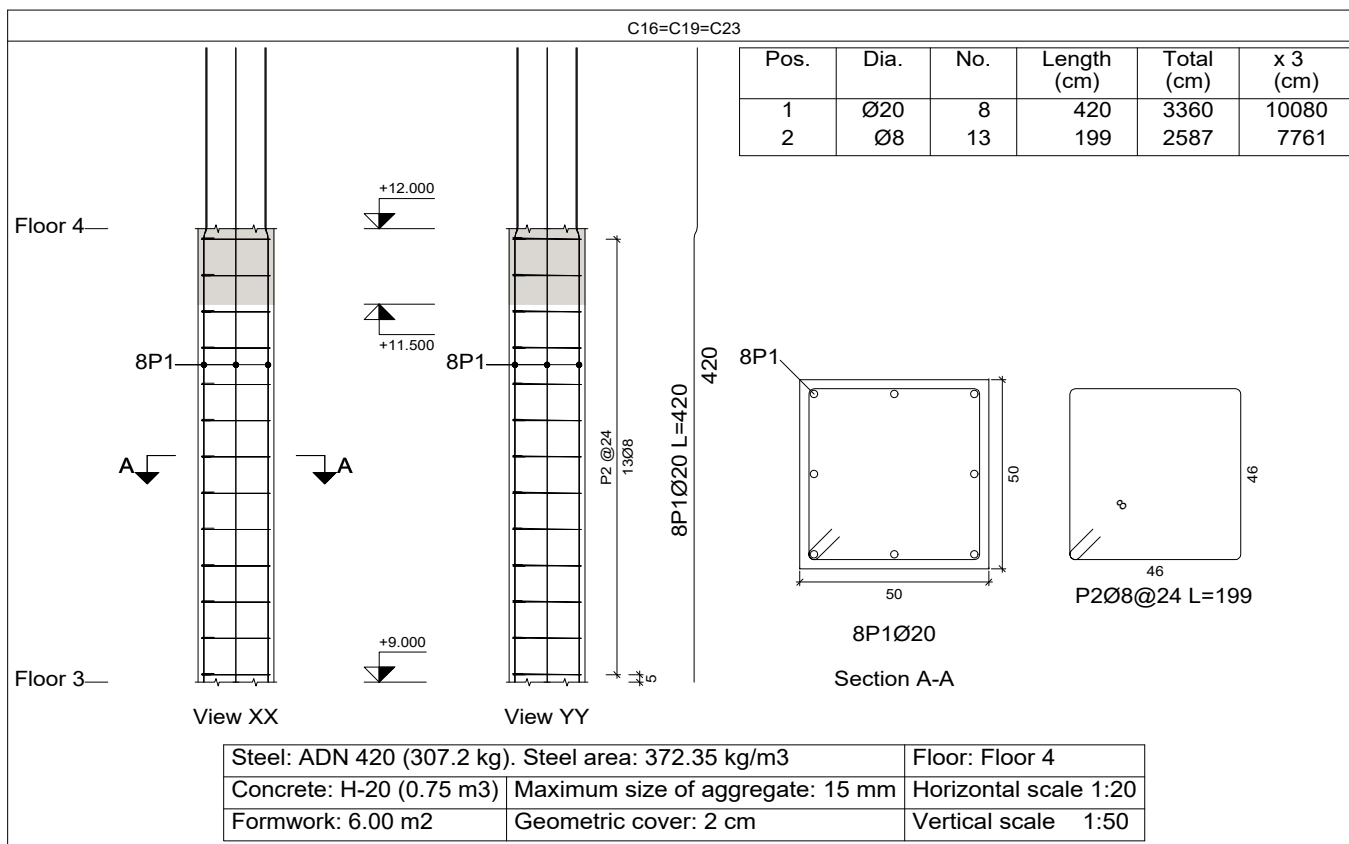
Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C16=C19=C23	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46 8	199	2587	10.2
					Total+10% (x3)	102.4	307.2



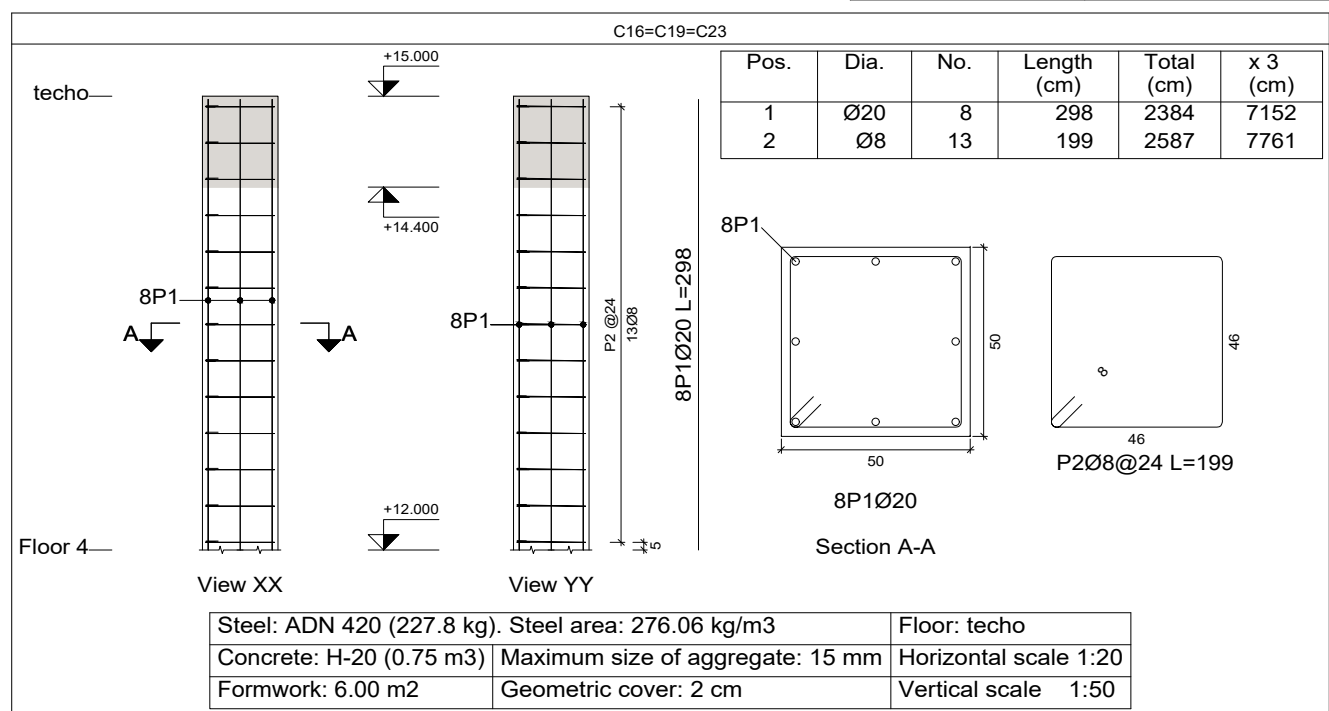
Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C16=C19=C23	1	Ø20	8	295 120	420	3360	82.9
	2	Ø8	13	46 8	199	2587	10.2
					Total+10% (x3)	102.4	307.2

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C16=C19=C23	1	Ø20	8	298 120	298	2384	58.6
	2	Ø8	13	46 8	199	2587	10.2
					Total+10% (x3)	75.9	227.7



Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Trabajo Final: Polo- Tecnologico, Master Plan

Universidad
Catolica de
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Columnas 30-29
-28-27-26-20-14-24-22

Project number 0001

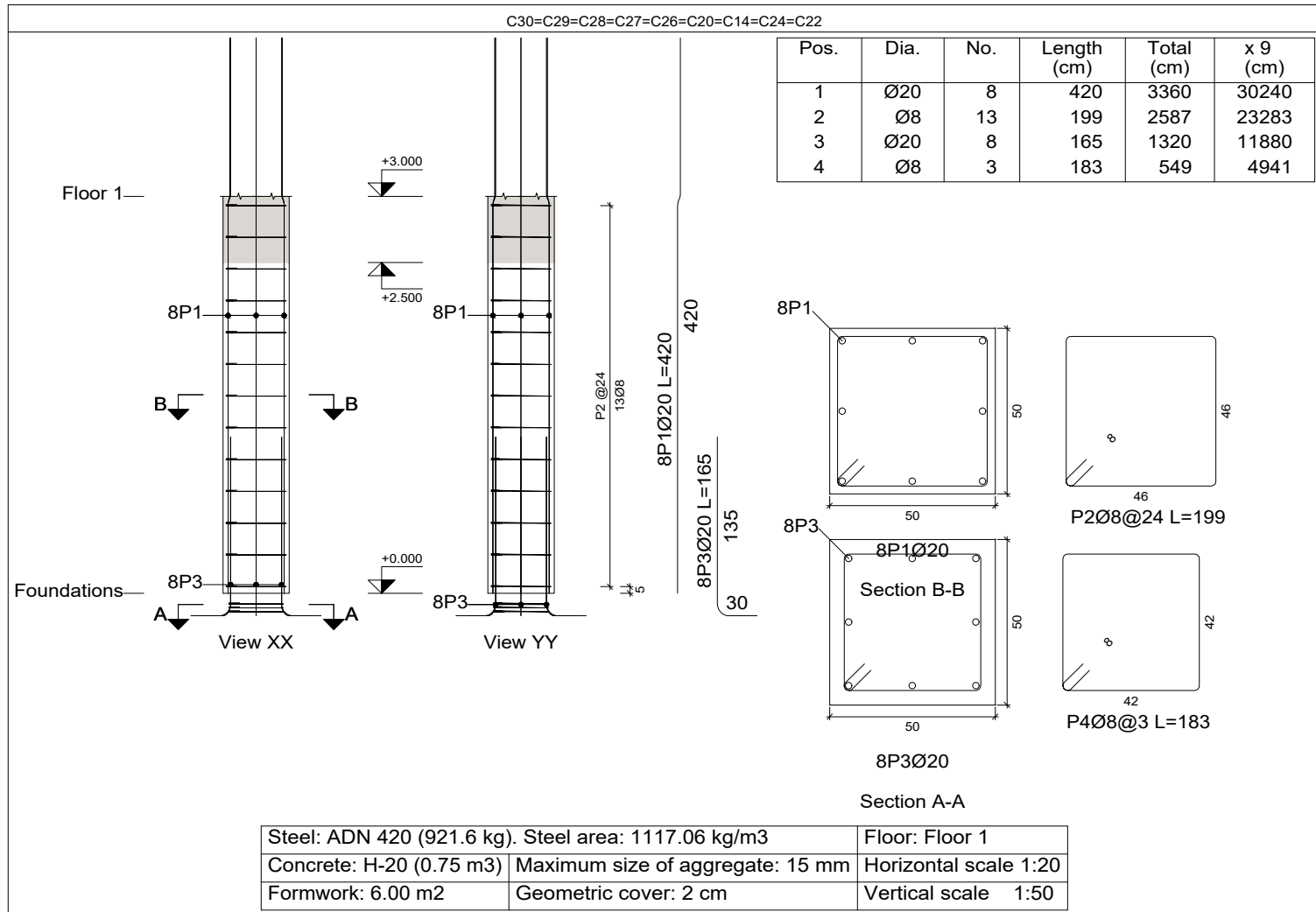
Date 21/10/2020

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A227

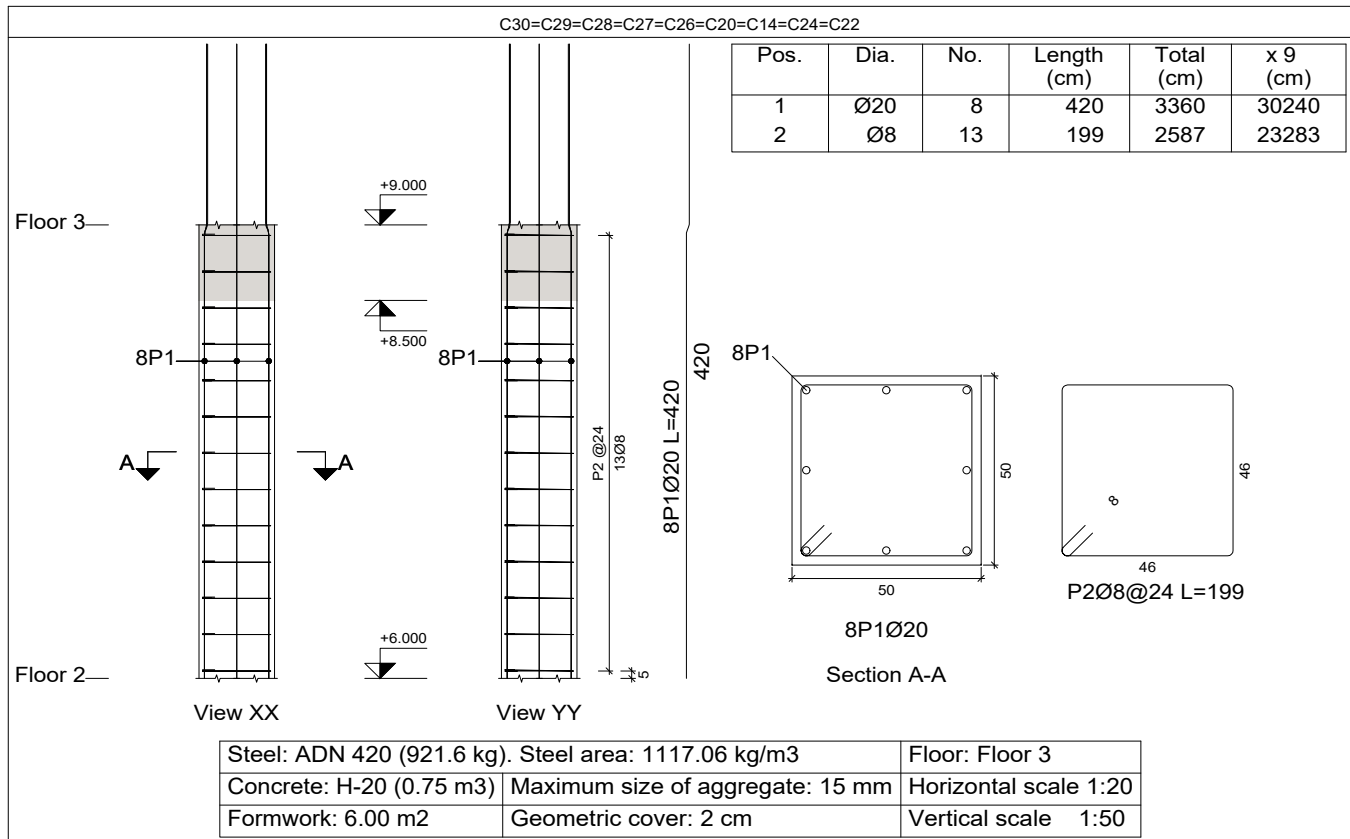
Scale 1 : 50



Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C30=C29=C28=C27=C26=C20=C14=C24=C22	1	Ø20	8		420	3360	82.9
	2	Ø8	13		199	2587	10.2
	3	Ø20	8		165	1320	32.6
	4	Ø8	3		183	549	2.2
Total+10% (x9)					140.7	1266.3	

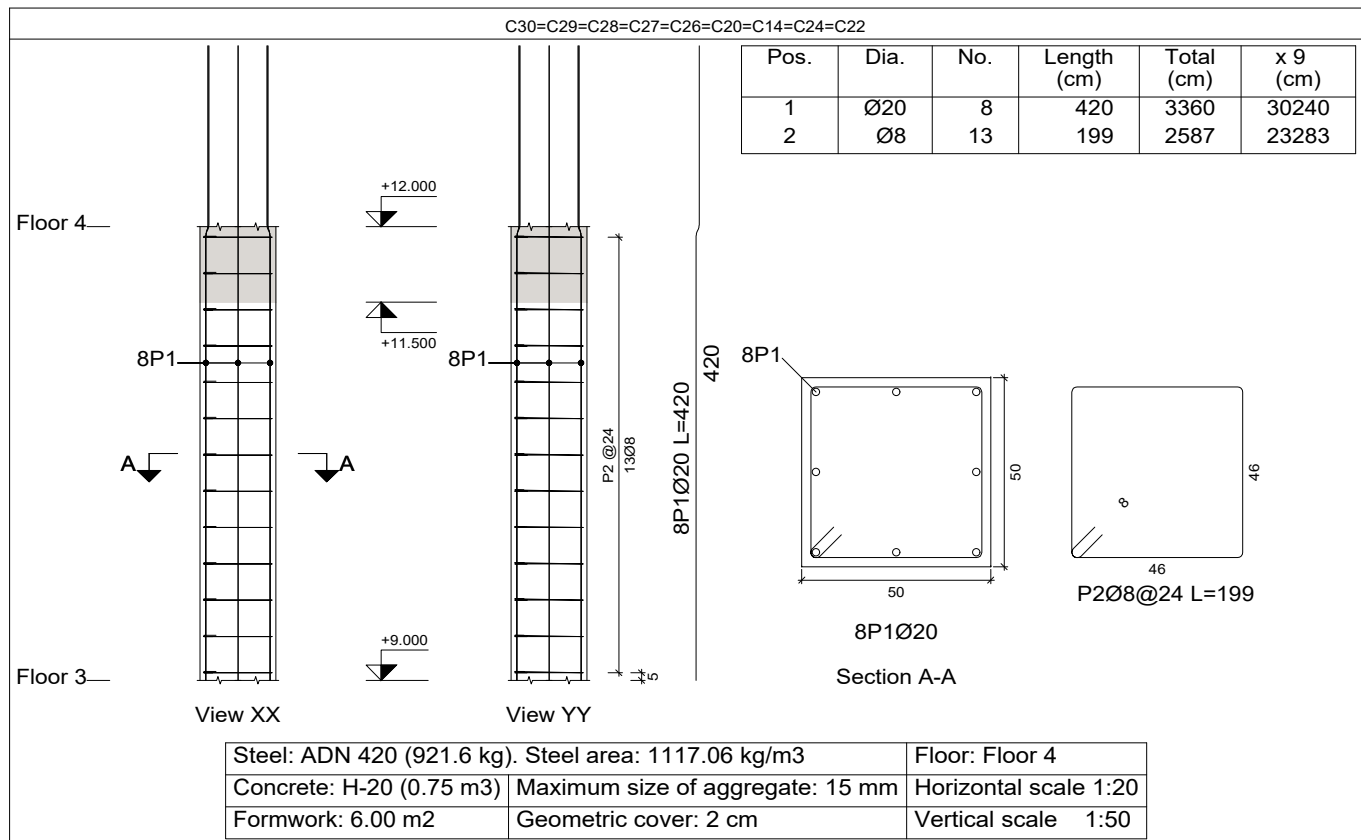
Floor: Floor 1
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C30=C29=C28=C27=C26=C20=C14=C24=C22	1	Ø20	8		420	3360	82.9
	2	Ø8	13		199	2587	10.2
Total+10% (x9)					102.4	921.6	

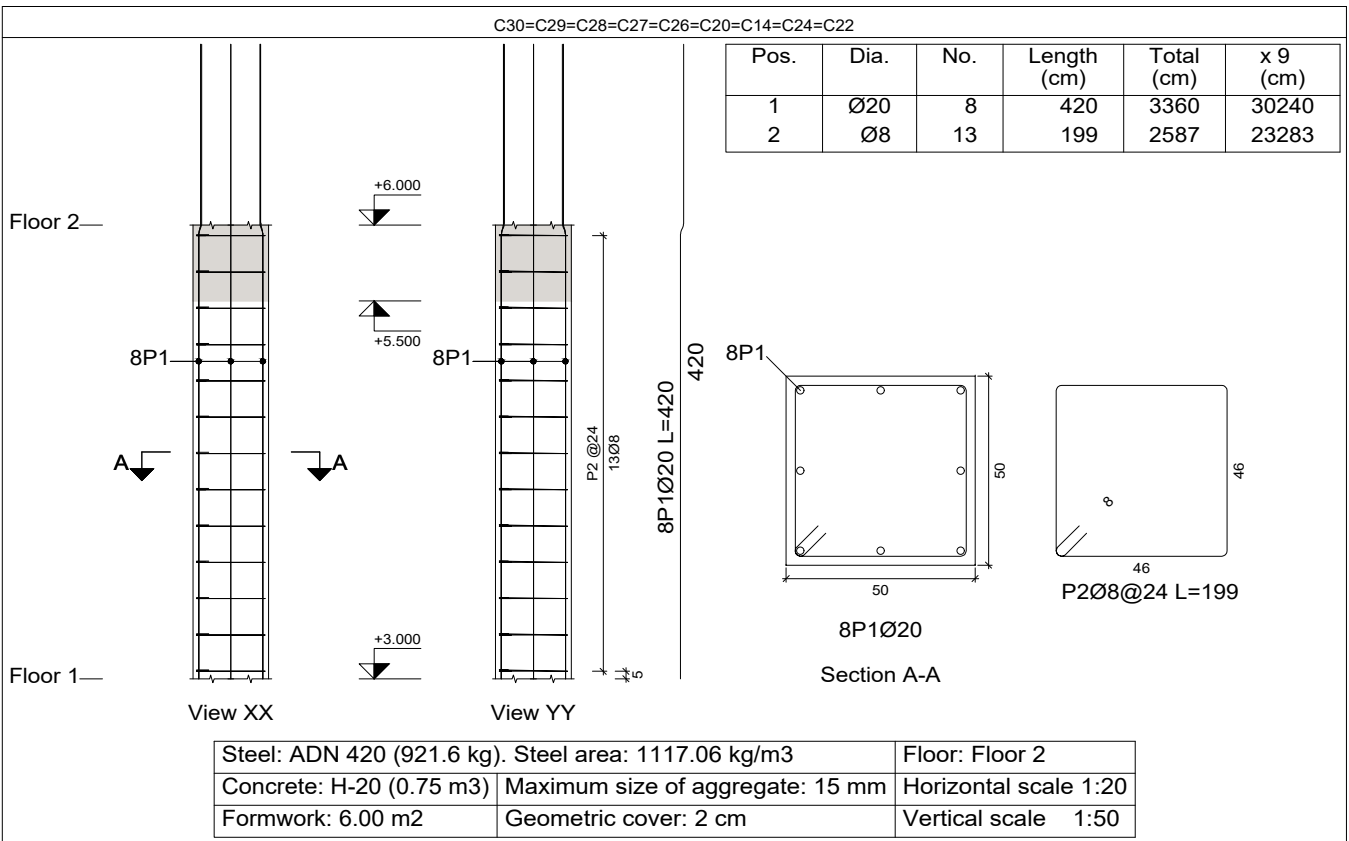


Floor: Floor 3
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C30=C29=C28=C27=C26=C20=C14=C24=C22	1	Ø20	8		420	3360	82.9
	2	Ø8	13		199	2587	10.2
Total+10% (x9)					102.4	921.6	

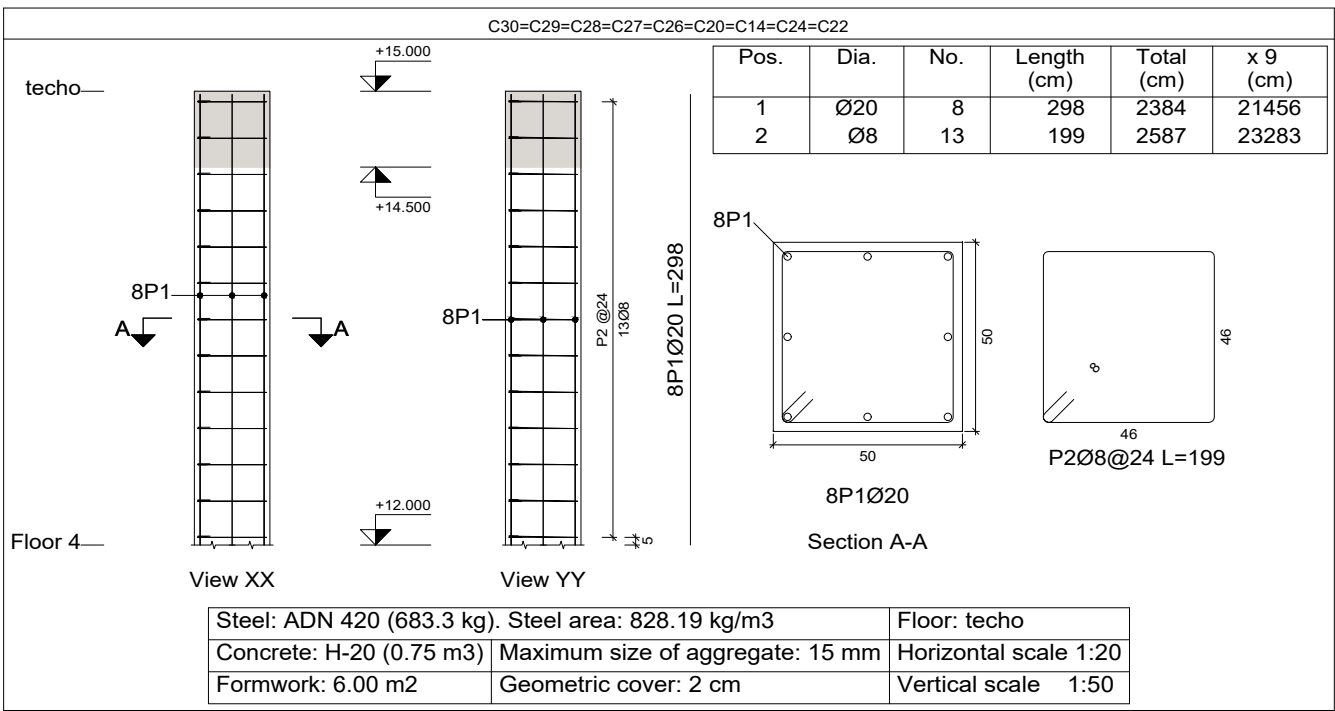


Floor: Floor 4
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420



Floor: Floor 2
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

Element	Pos.	Dia.	No.	Diagram (cm)	Length (cm)	Total (cm)	ADN 420 (kg)
C30=C29=C28=C27=C26=C20=C14=C24=C22	1	Ø20	8		298	2384	58.8
	2	Ø8	13		199	2587	10.2
Total+10% (x9)					75.9	683.1	



Floor: techo
Concrete: H-20
Steel in bars: ADN 420
Steel in stirrups: ADN 420

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Planta
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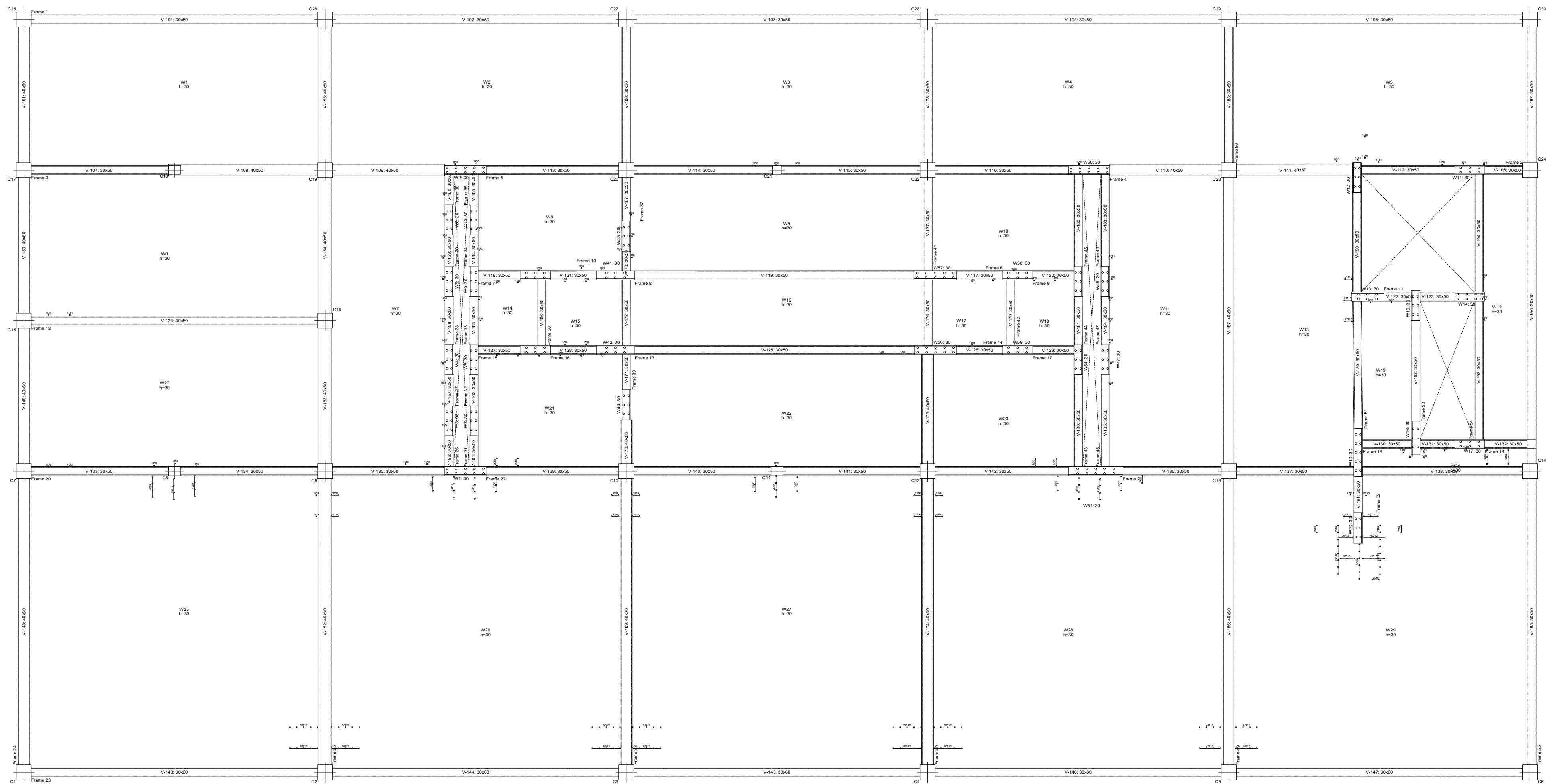
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Scale 1 : 100



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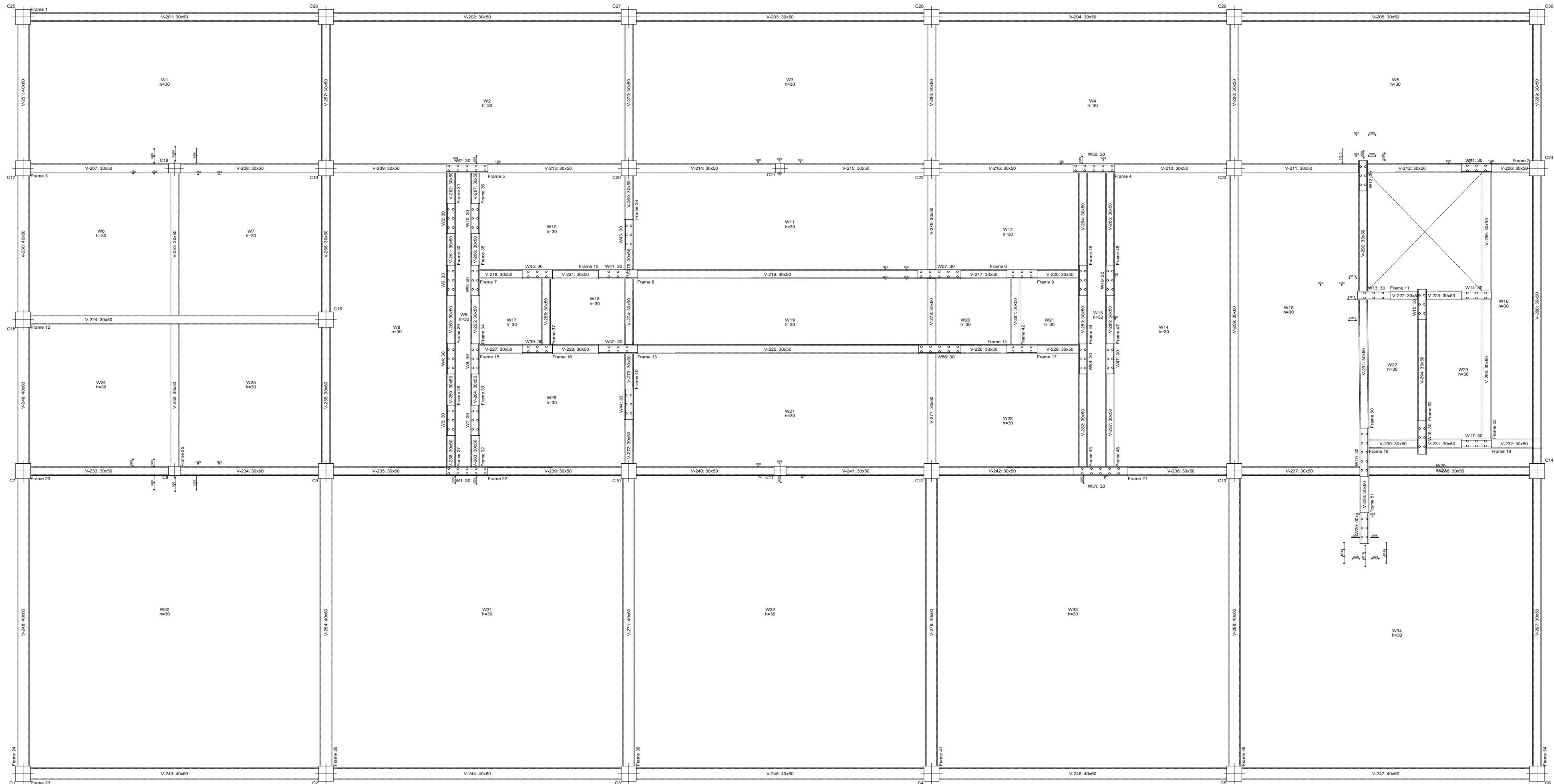
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Walls
Lined
Concrete in 30
Steel in Reinforced ACN 430
Scale 1:100

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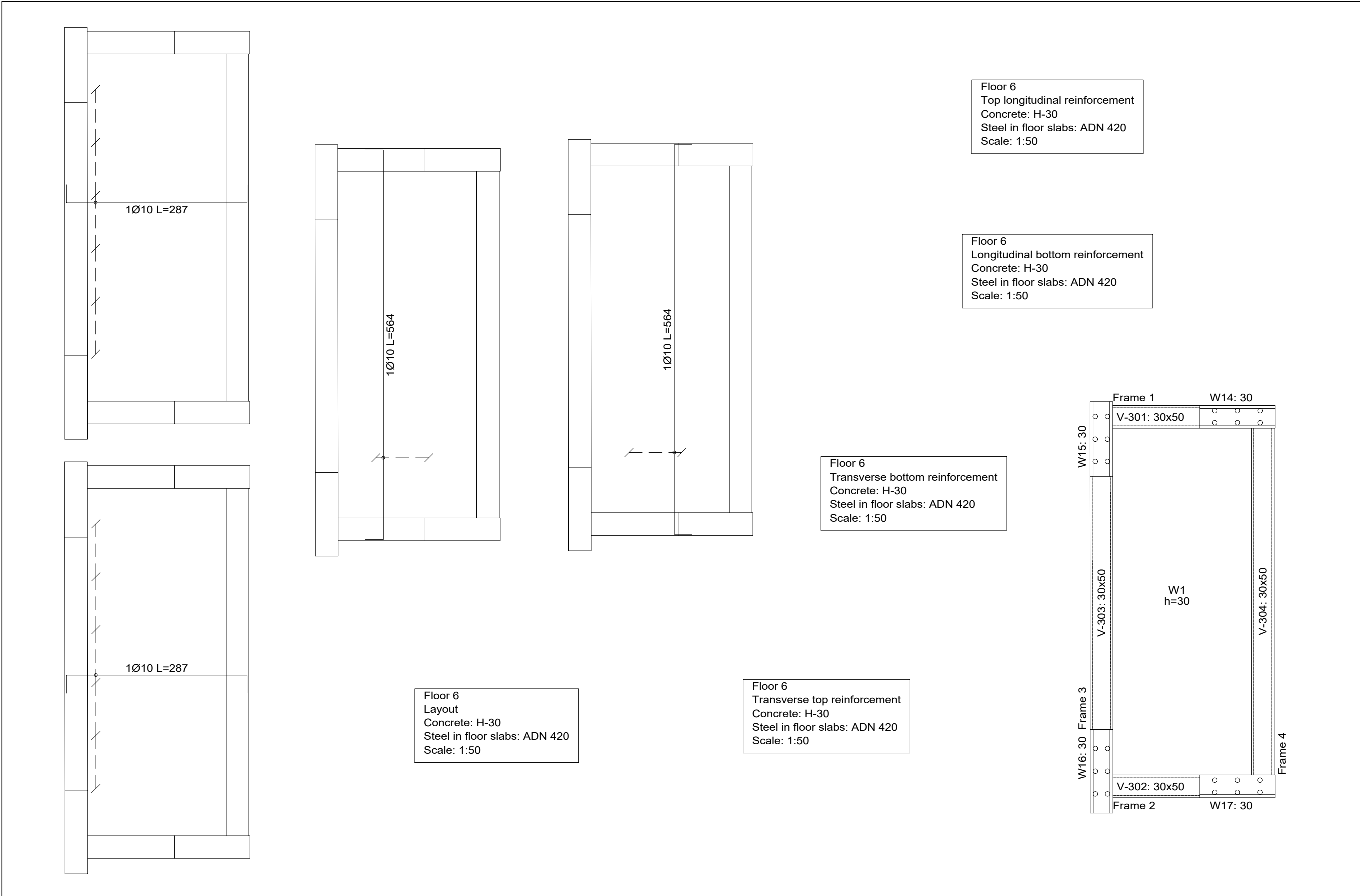
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Planta Estructural:
Armadura

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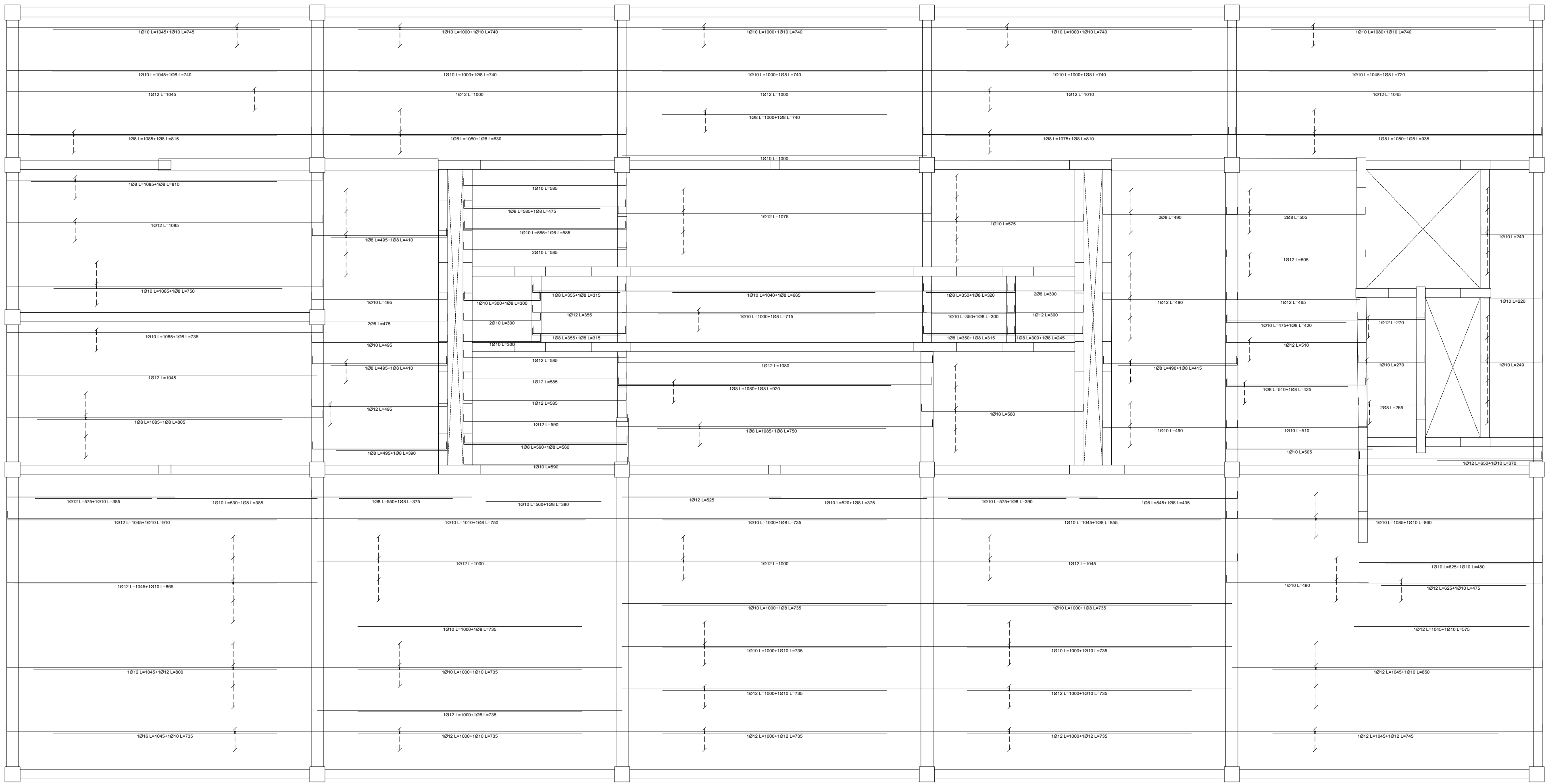
Date 21/10/2020

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A231

Scale 1 : 100



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Planta Estructural: Armadura

Project number	0001
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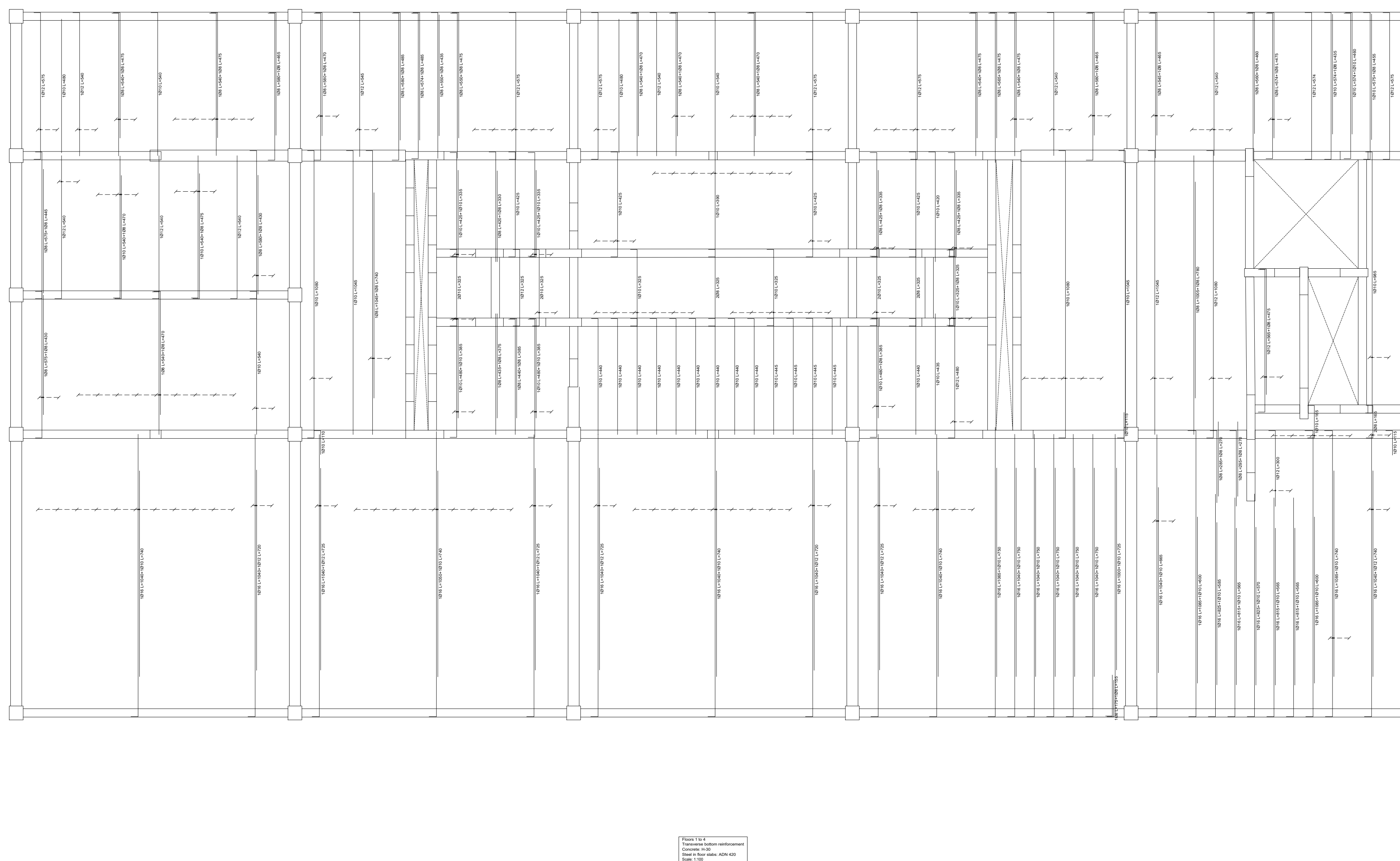
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A232

Scale	1 : 100
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A233

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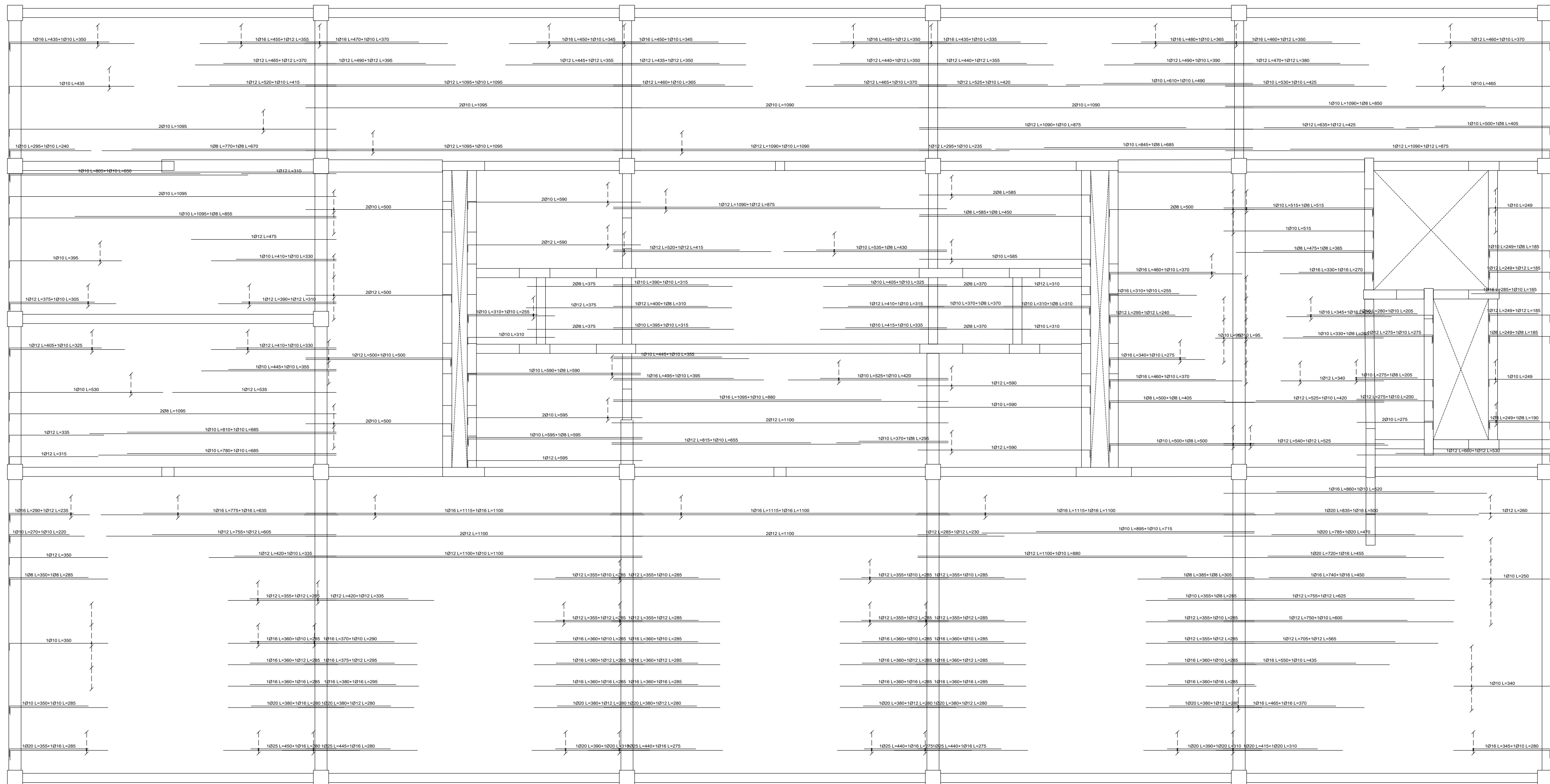


Figura 12-4:
Plan de reforzamiento estructural.
Concreto: Fc=30.
Diseño en Teor. ACI 318-05.
Escala: 1:100.



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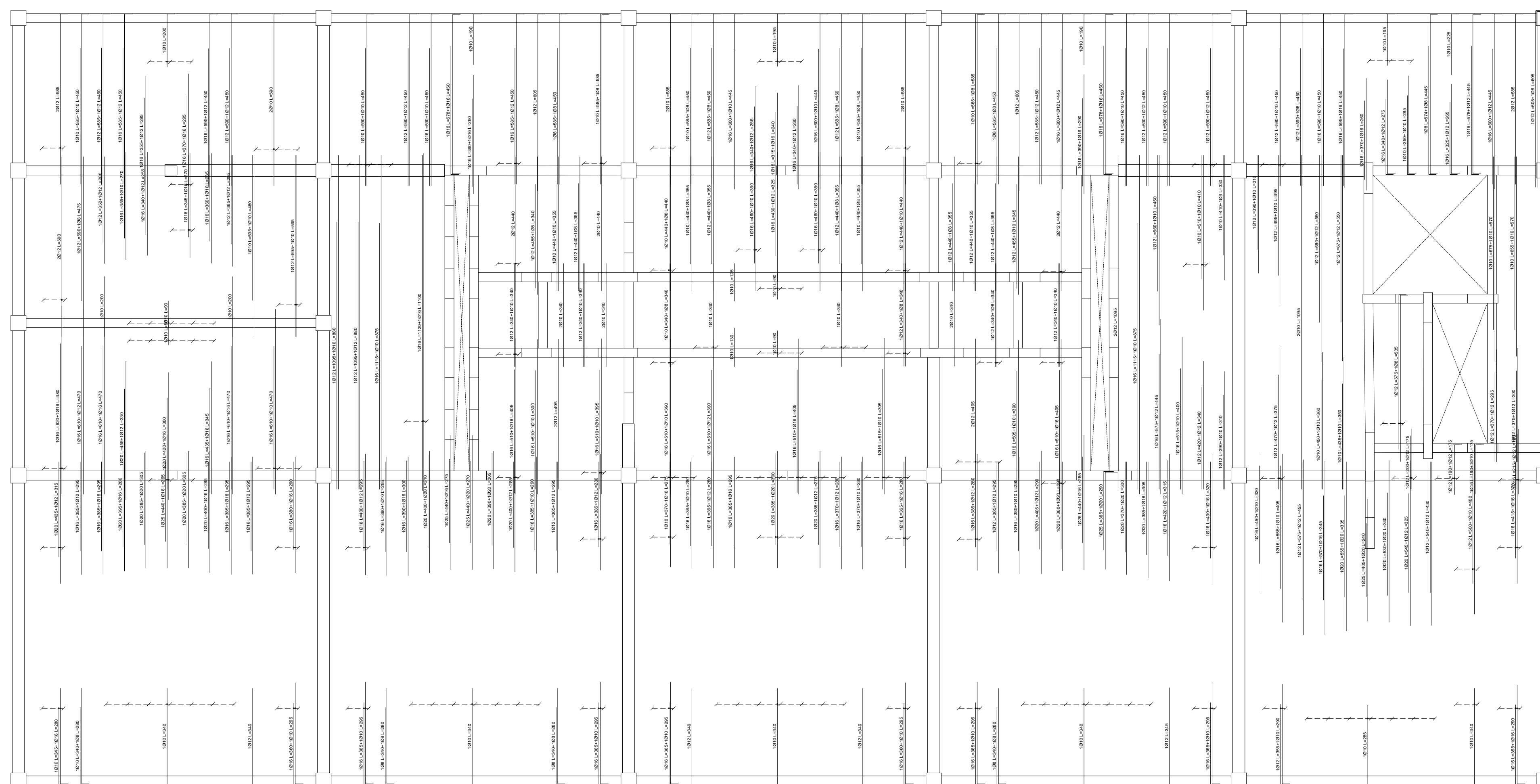
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A234

Scale	1 : 100
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Floors 1 to 4
Transverse top reinforcement
Concrete: H-30
Steel in floor slabs: ADN 420

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Planta Estructural:
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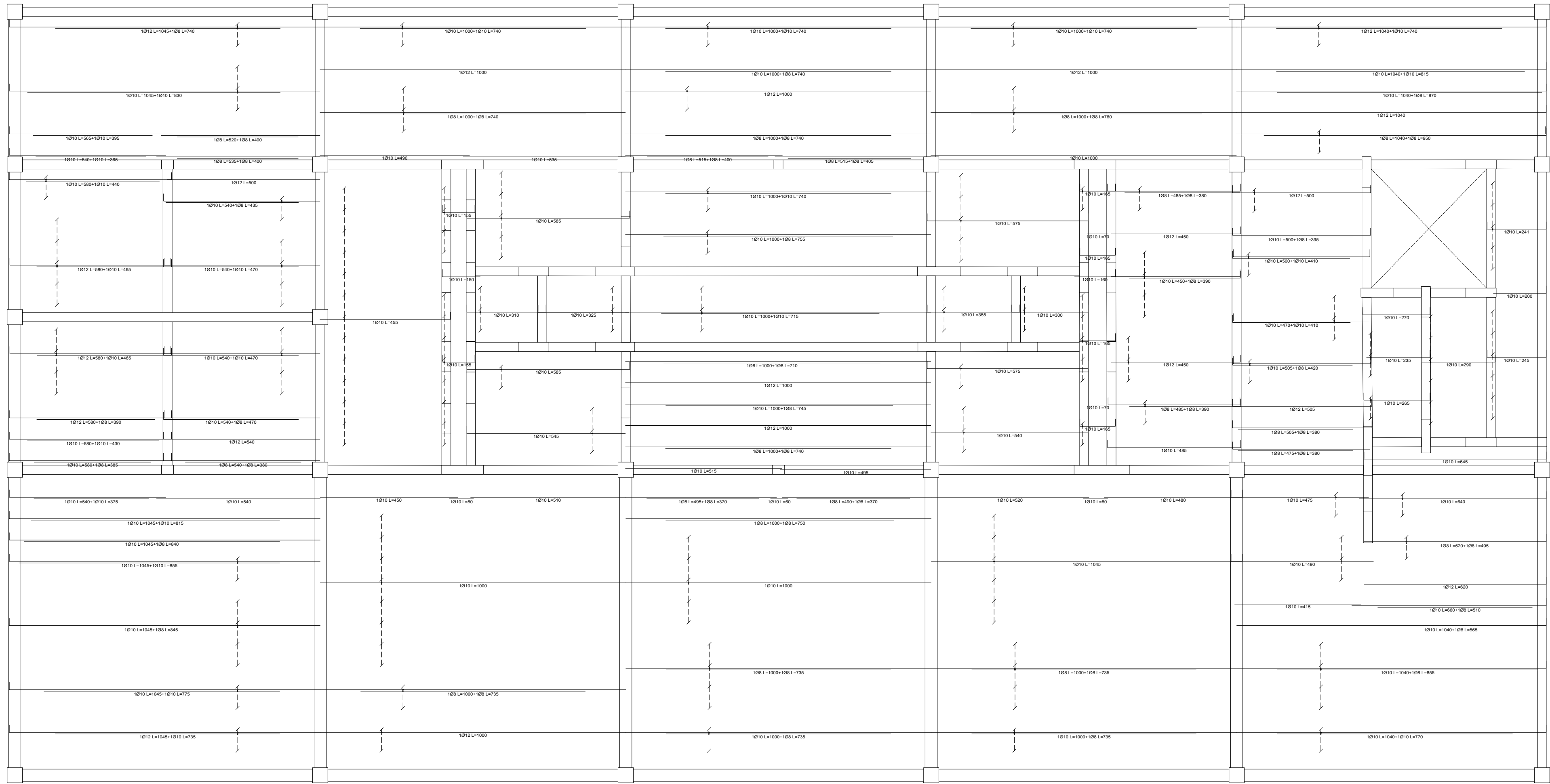
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Scale 1 : 100



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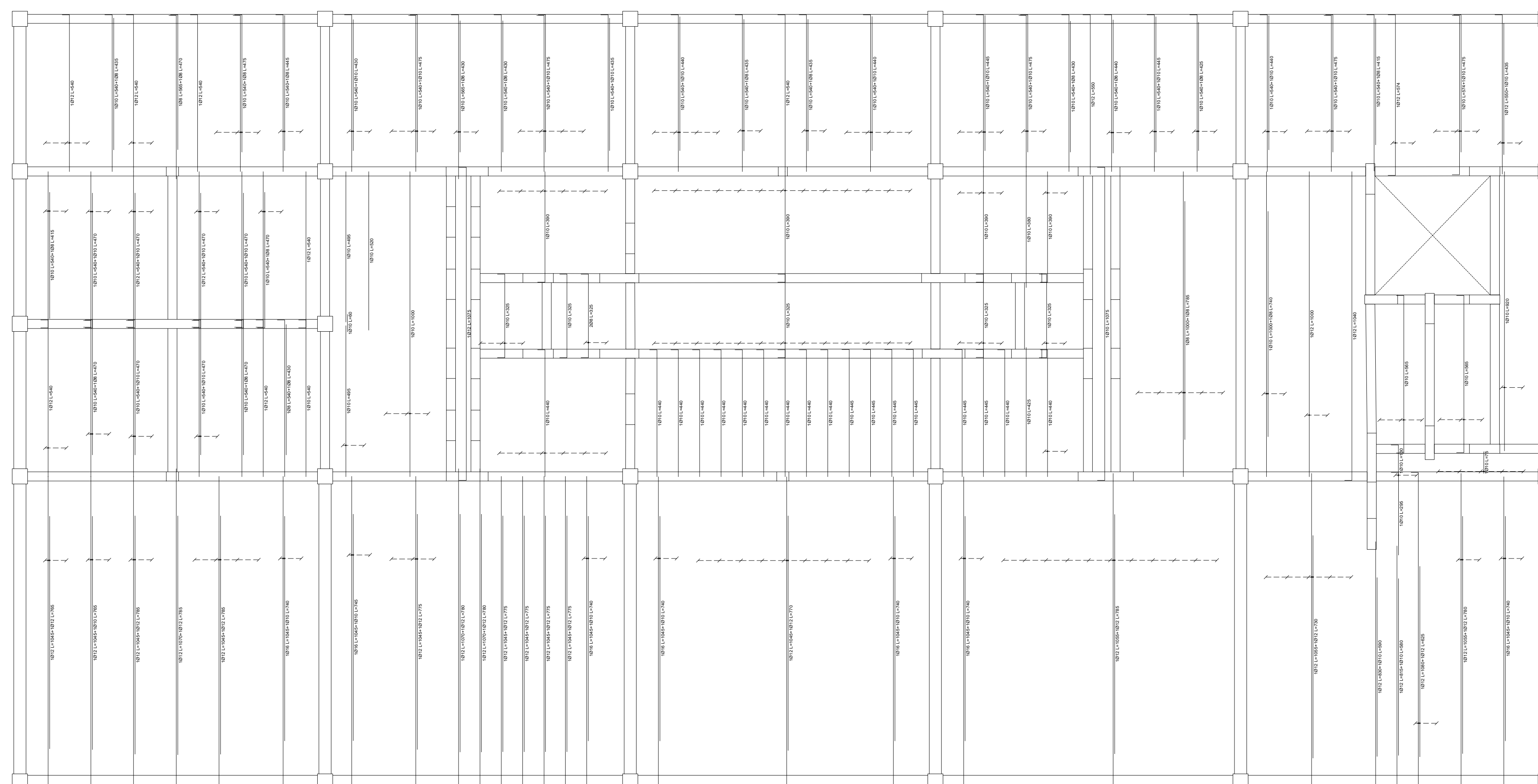
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A236

Scale 1 : 100



techo
Transverse bottom reinforcement
Concrete: H-30
Steel in floor slabs: ADN 420
Elev. 0.000

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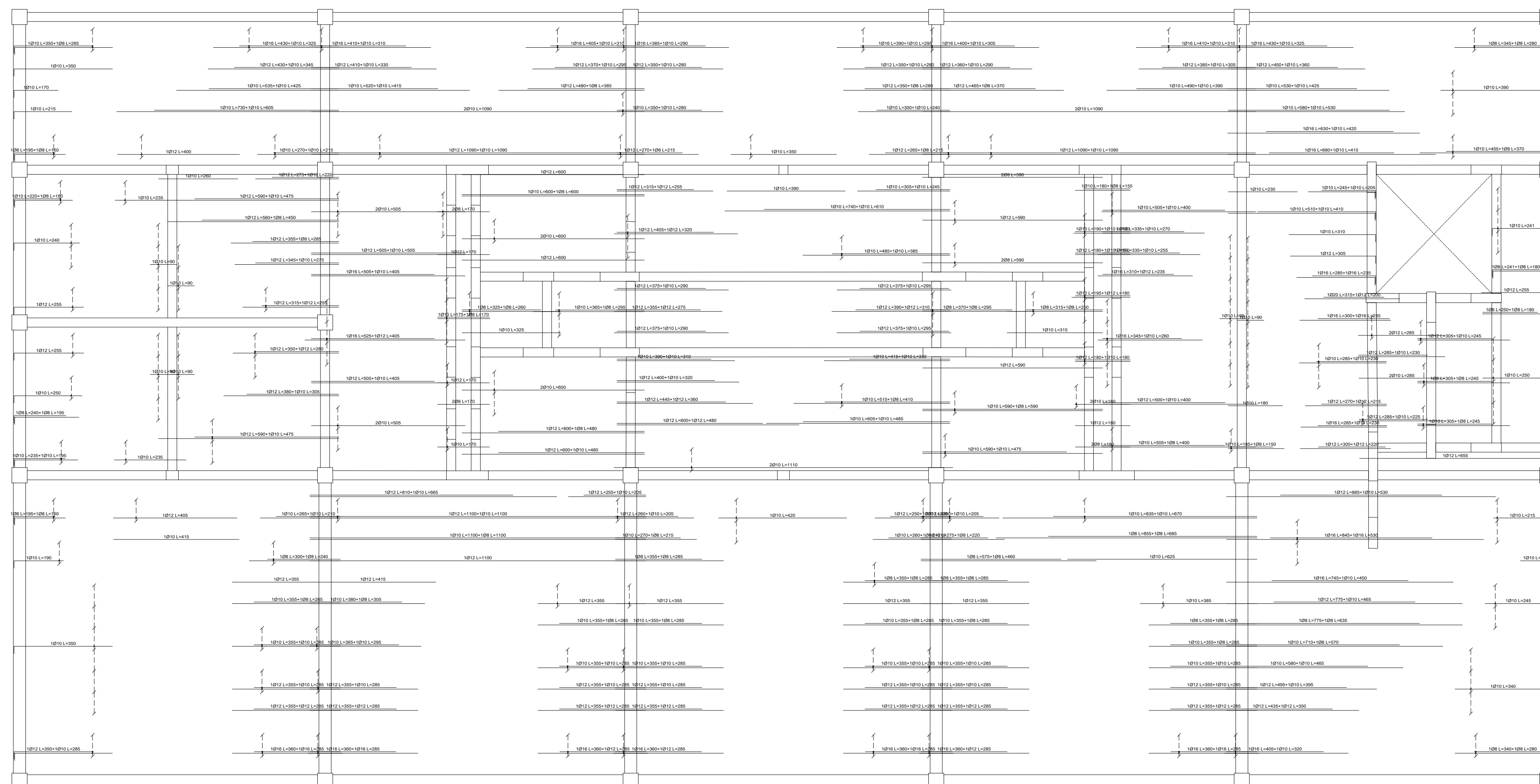
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A237

Scale 1 : 100



techo
Top longitudinal reinforcement
Concrete: H-30
Steel in floor slabs: ADN 420
Scale: 1/100

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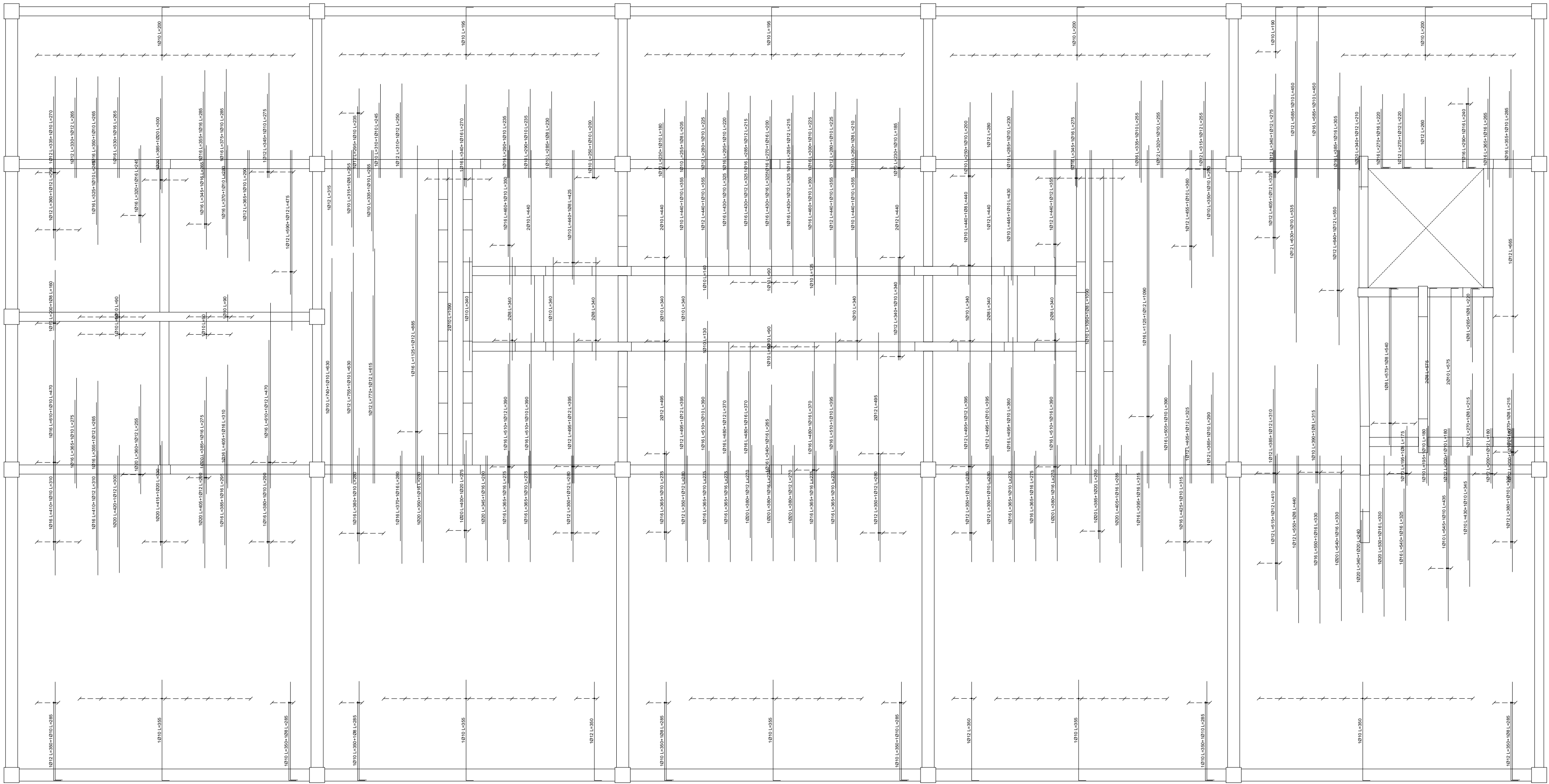
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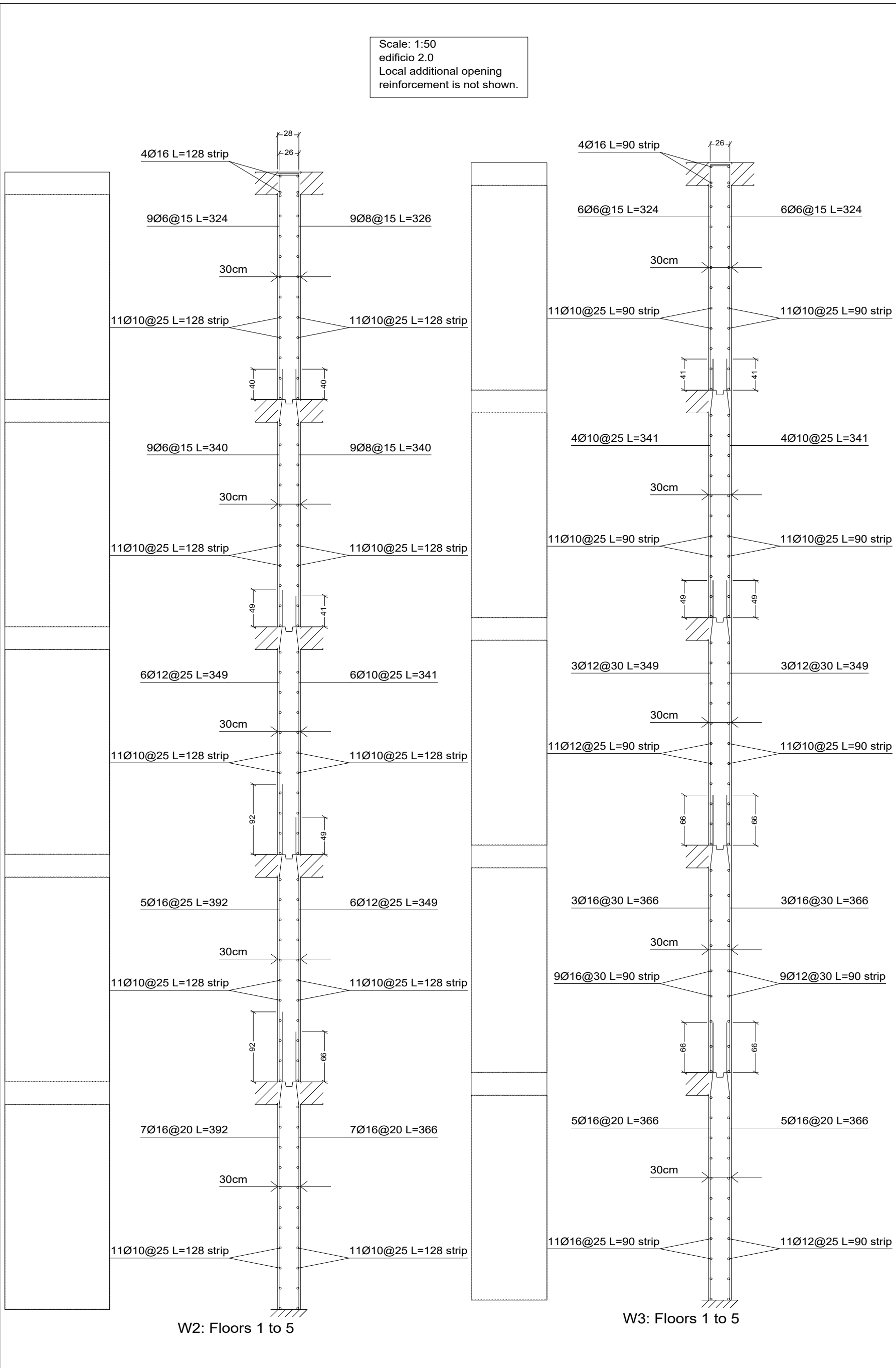
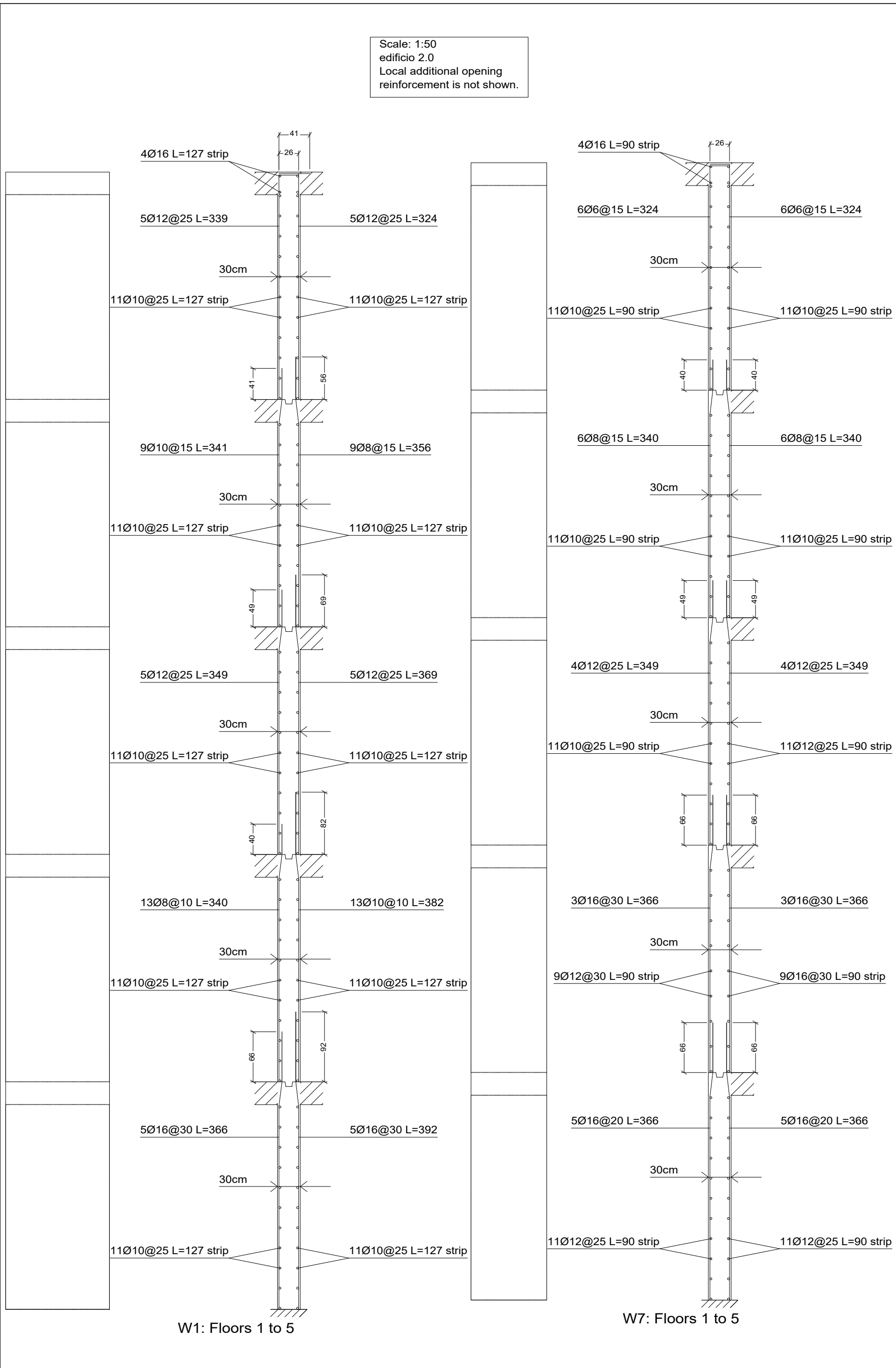
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Scale 1 : 50



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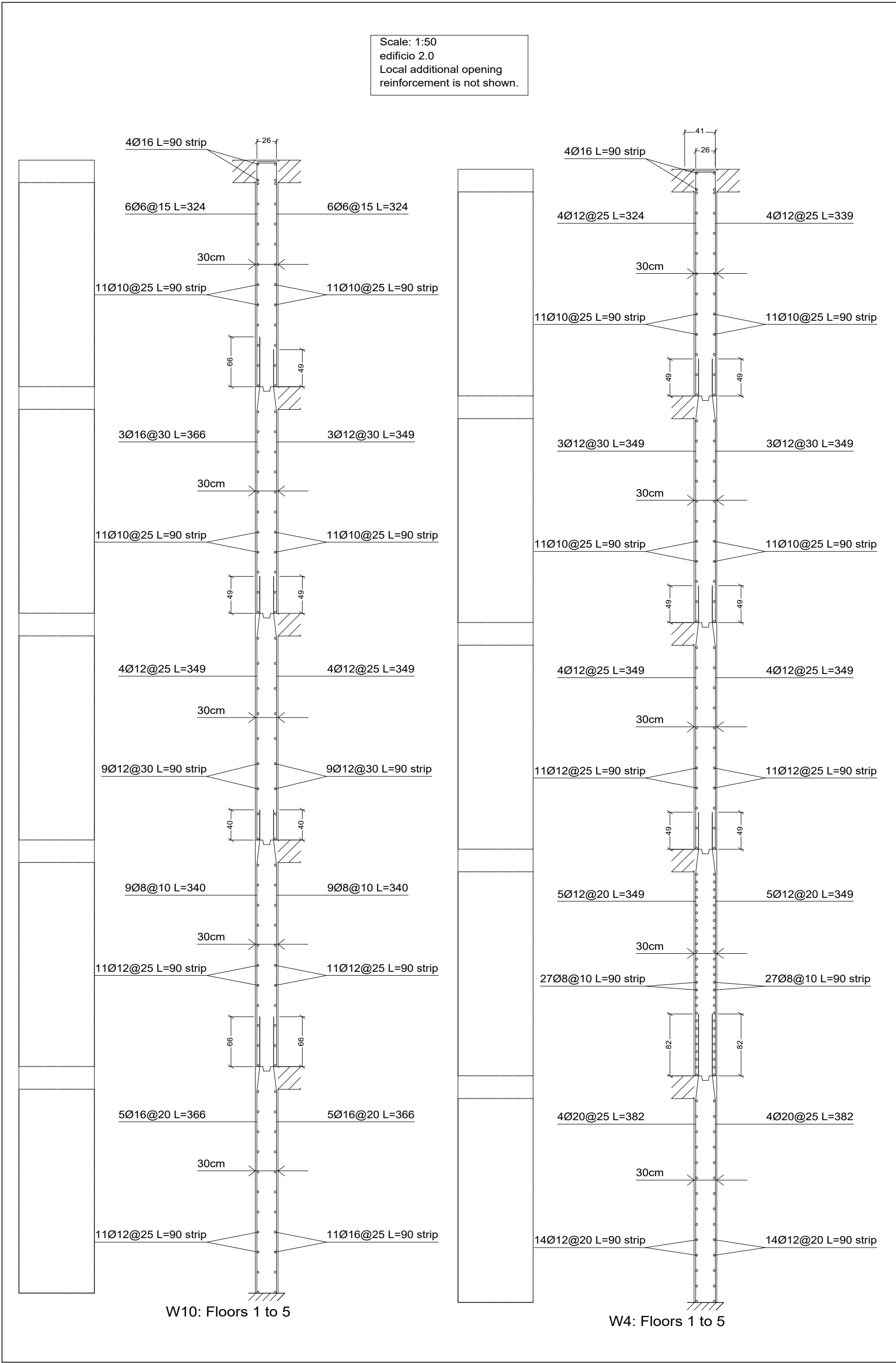
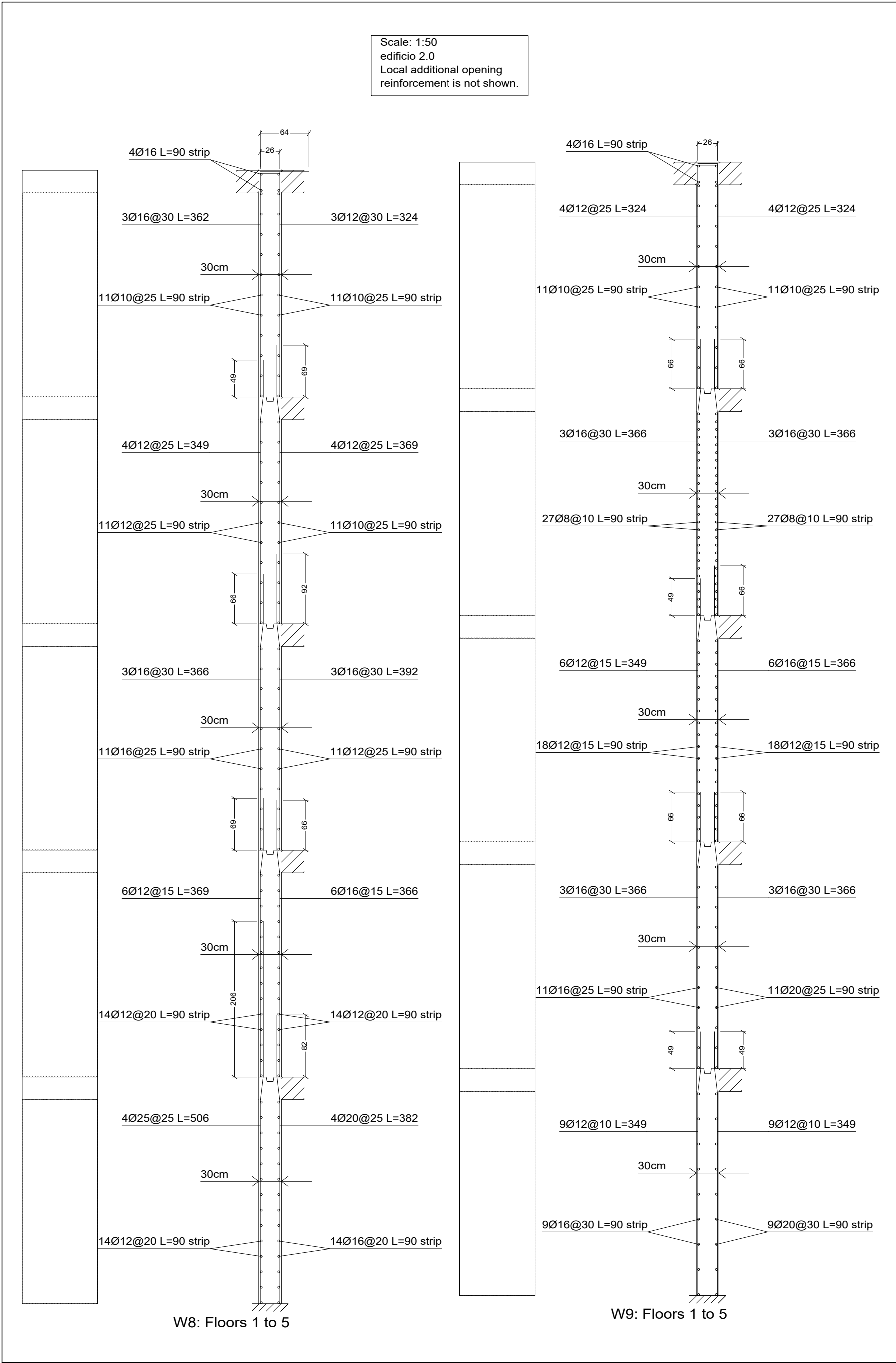
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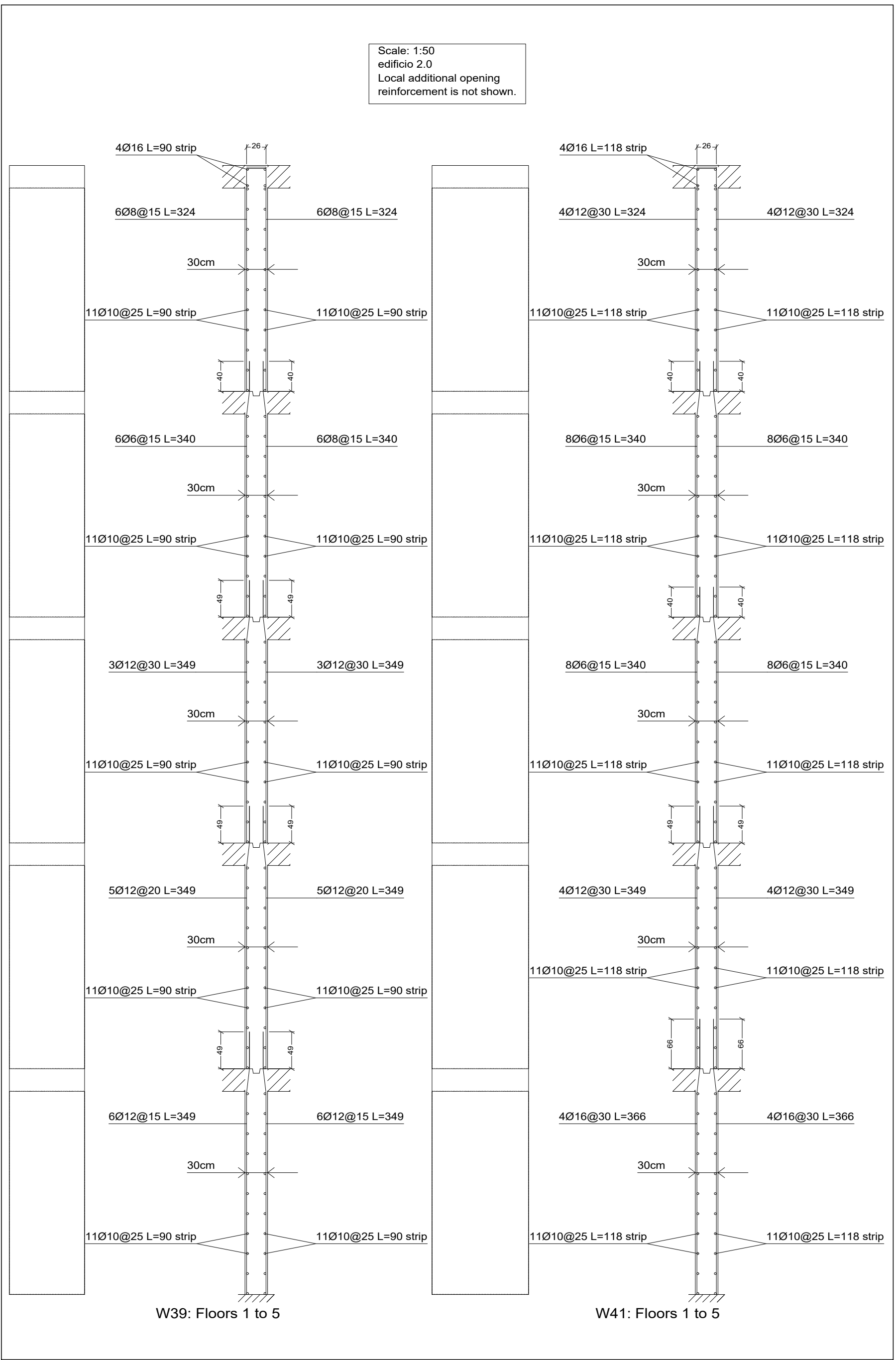
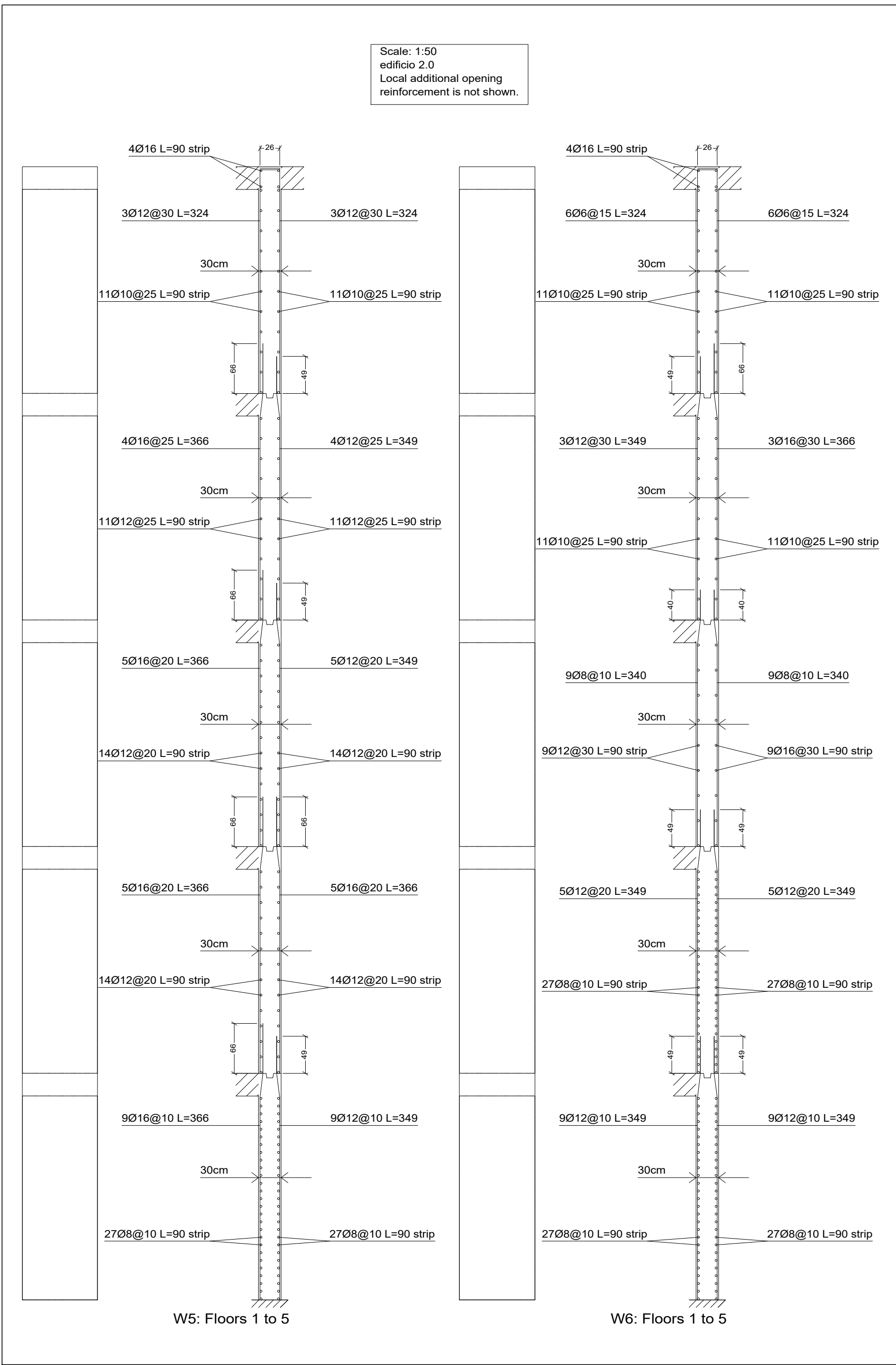
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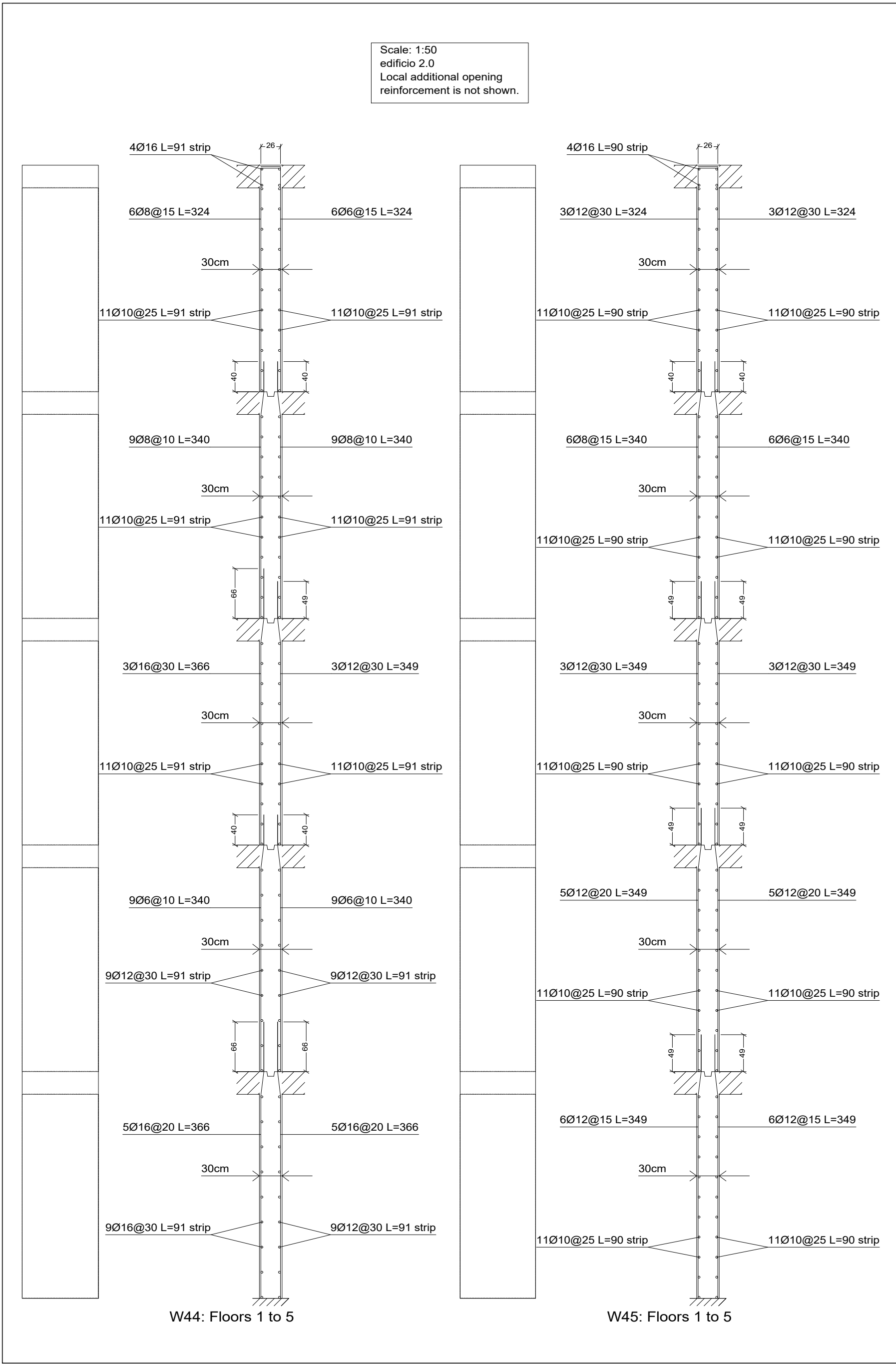
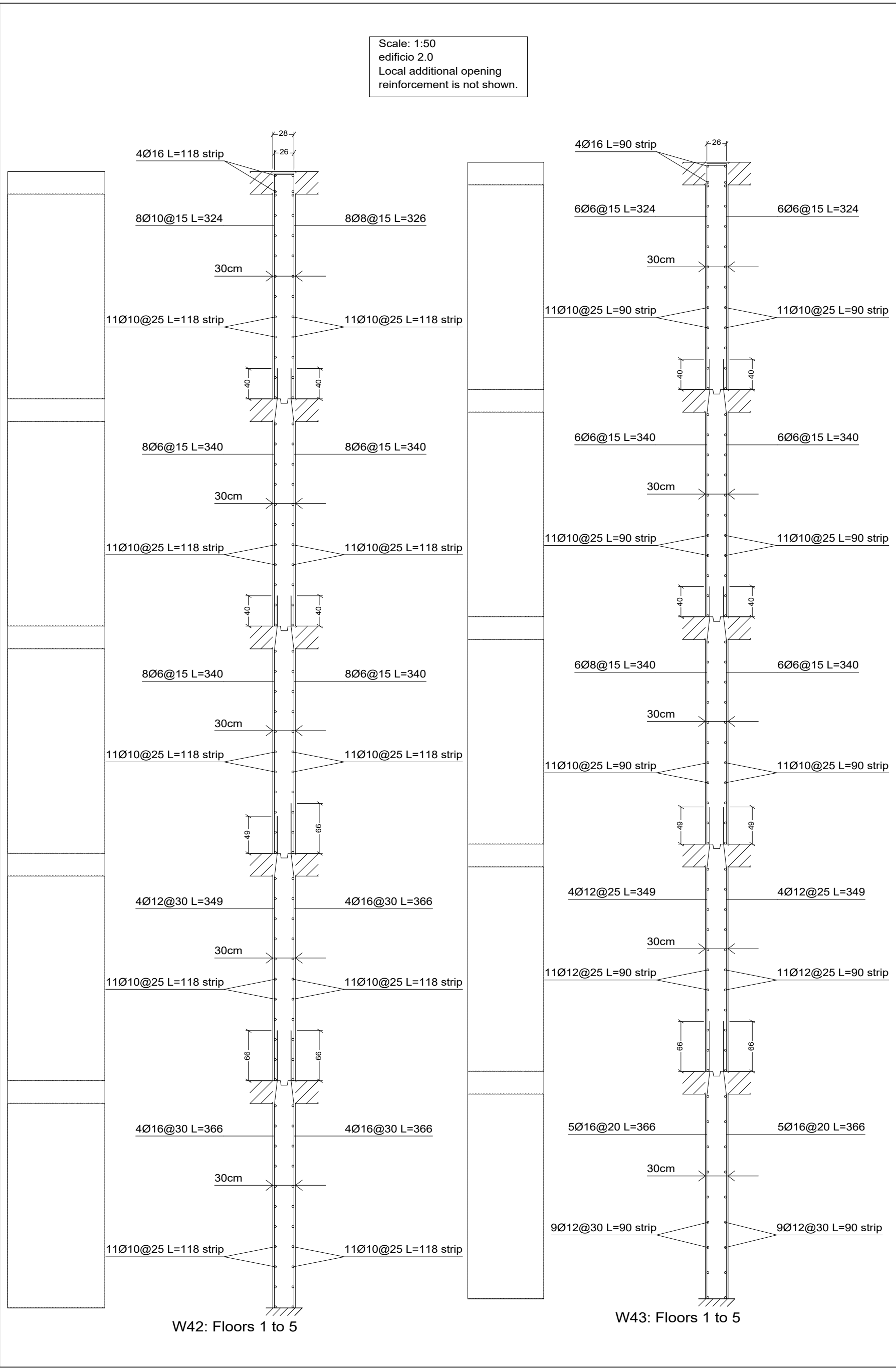
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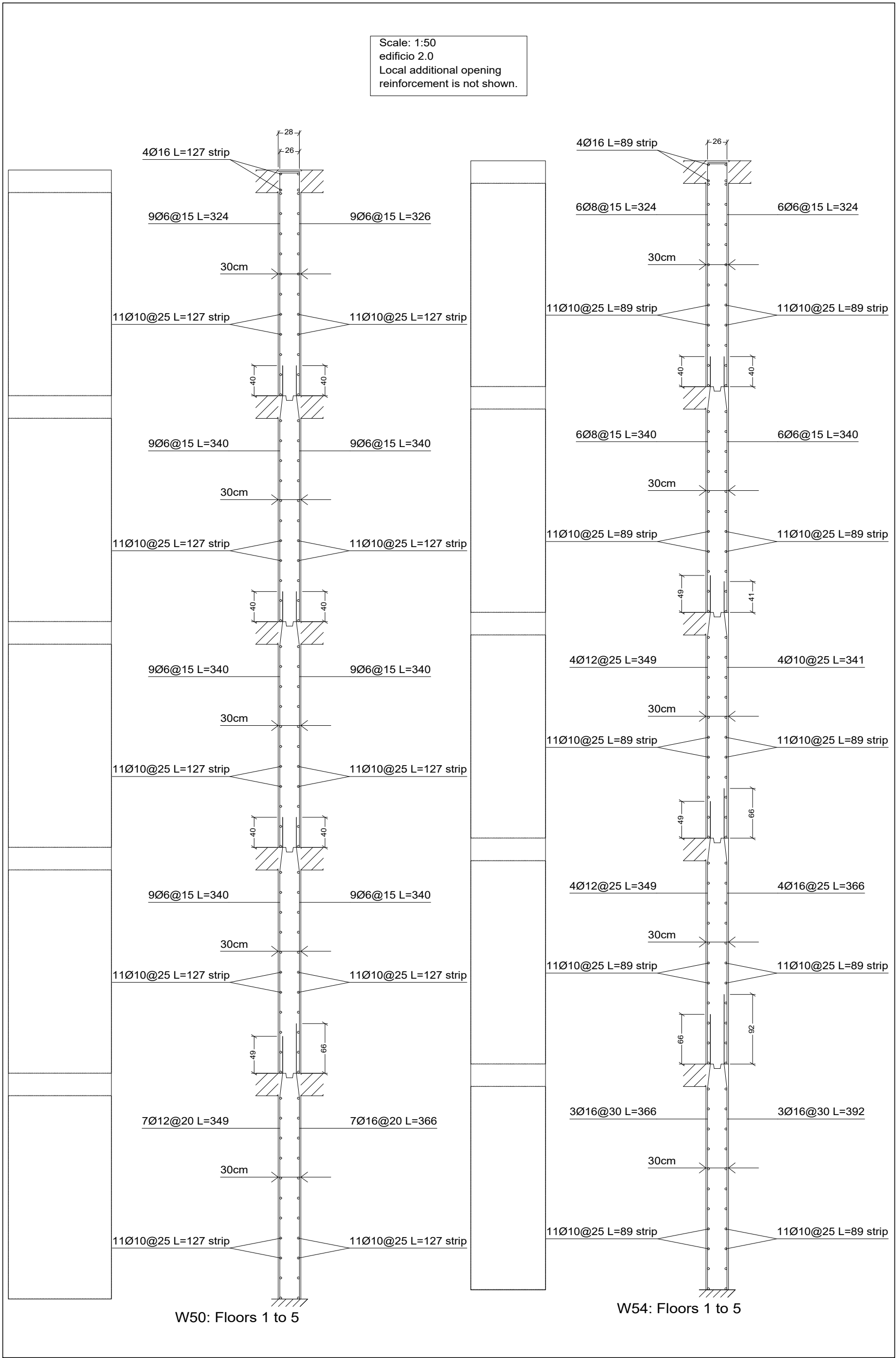
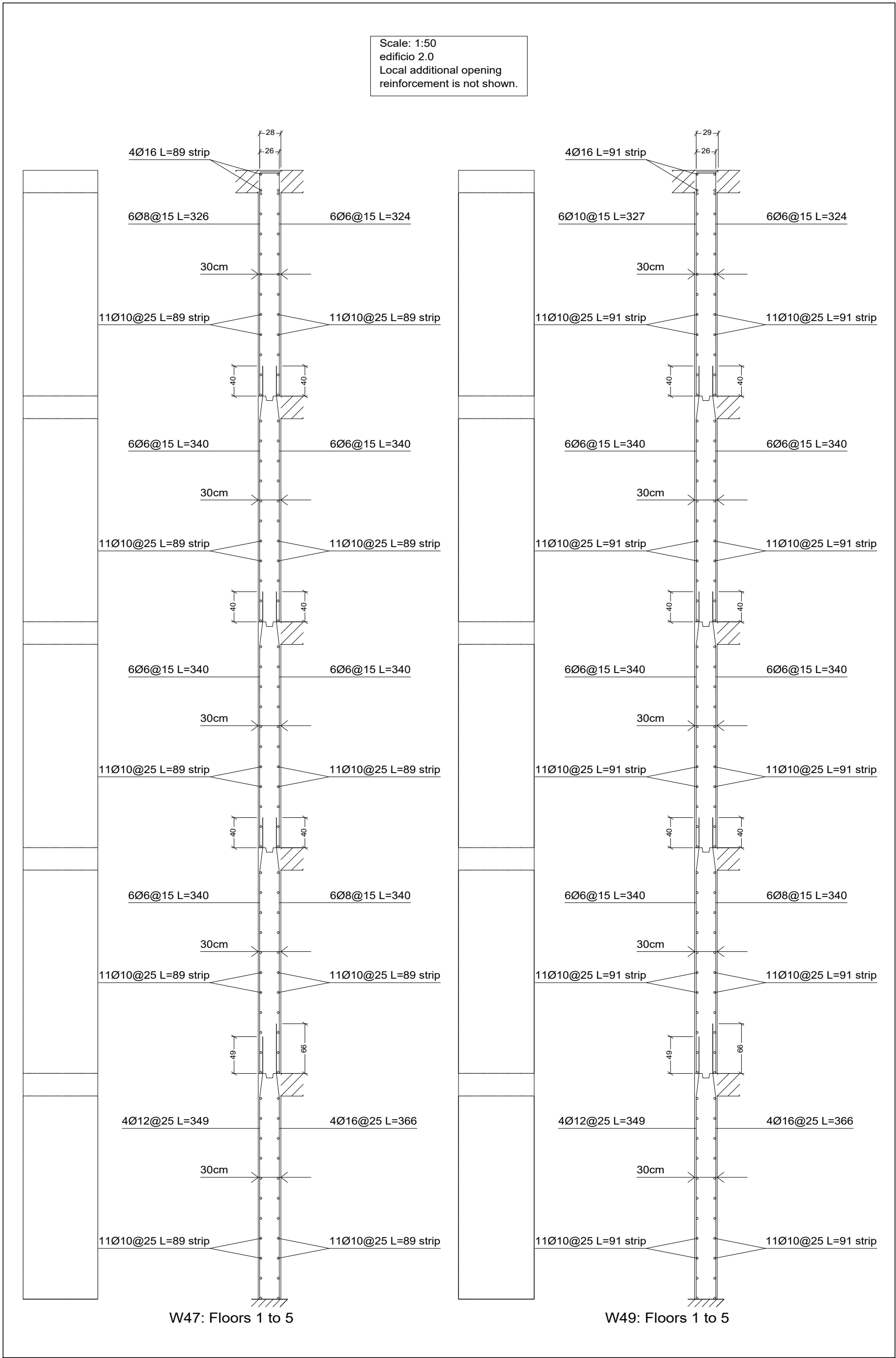
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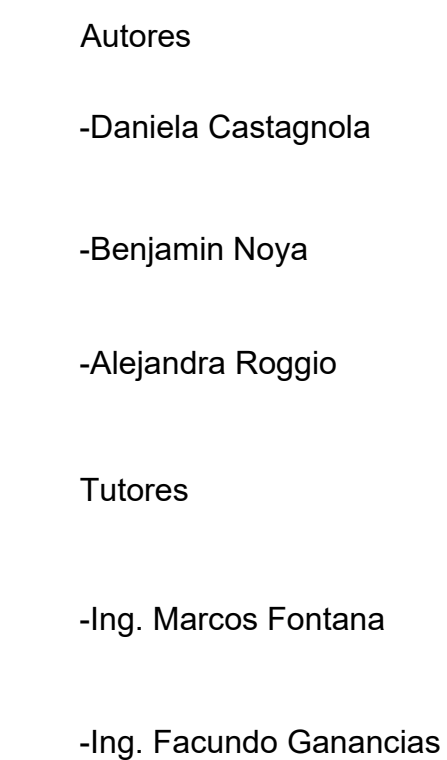
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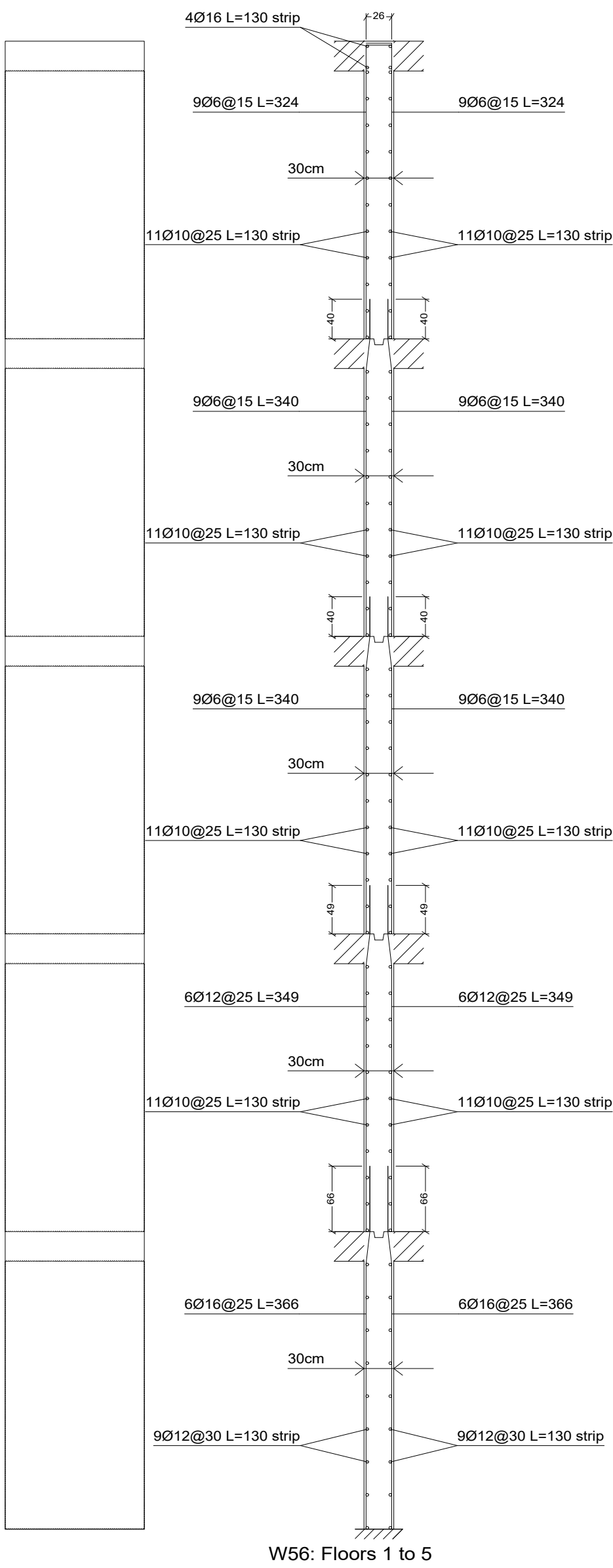
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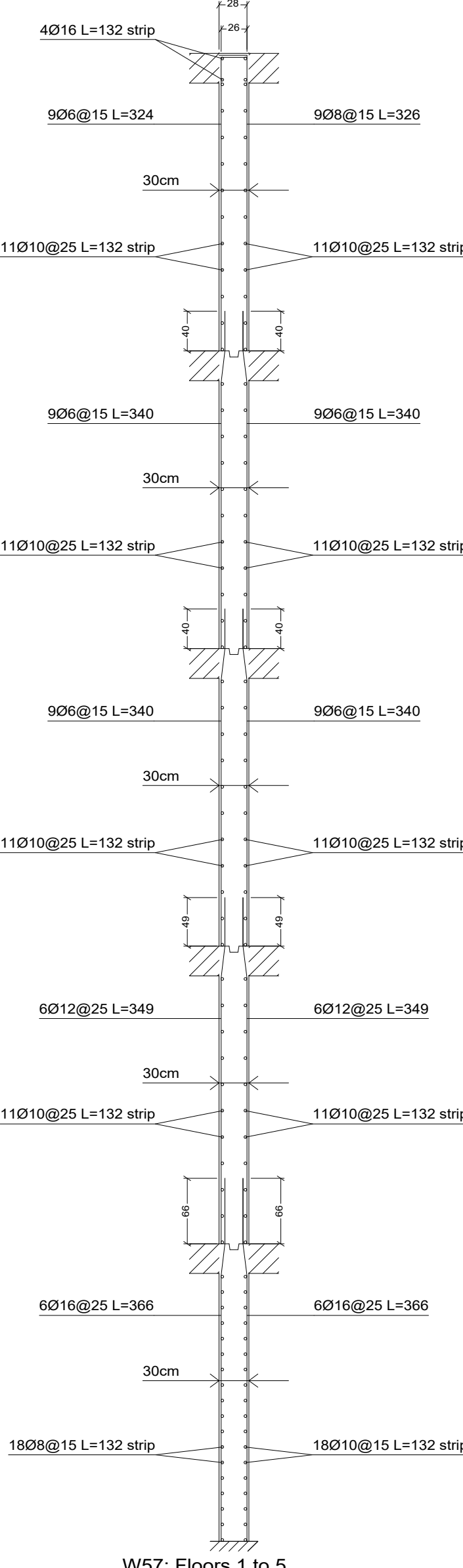
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W56: Floors 1 to 5



W57: Floors 1 to 5

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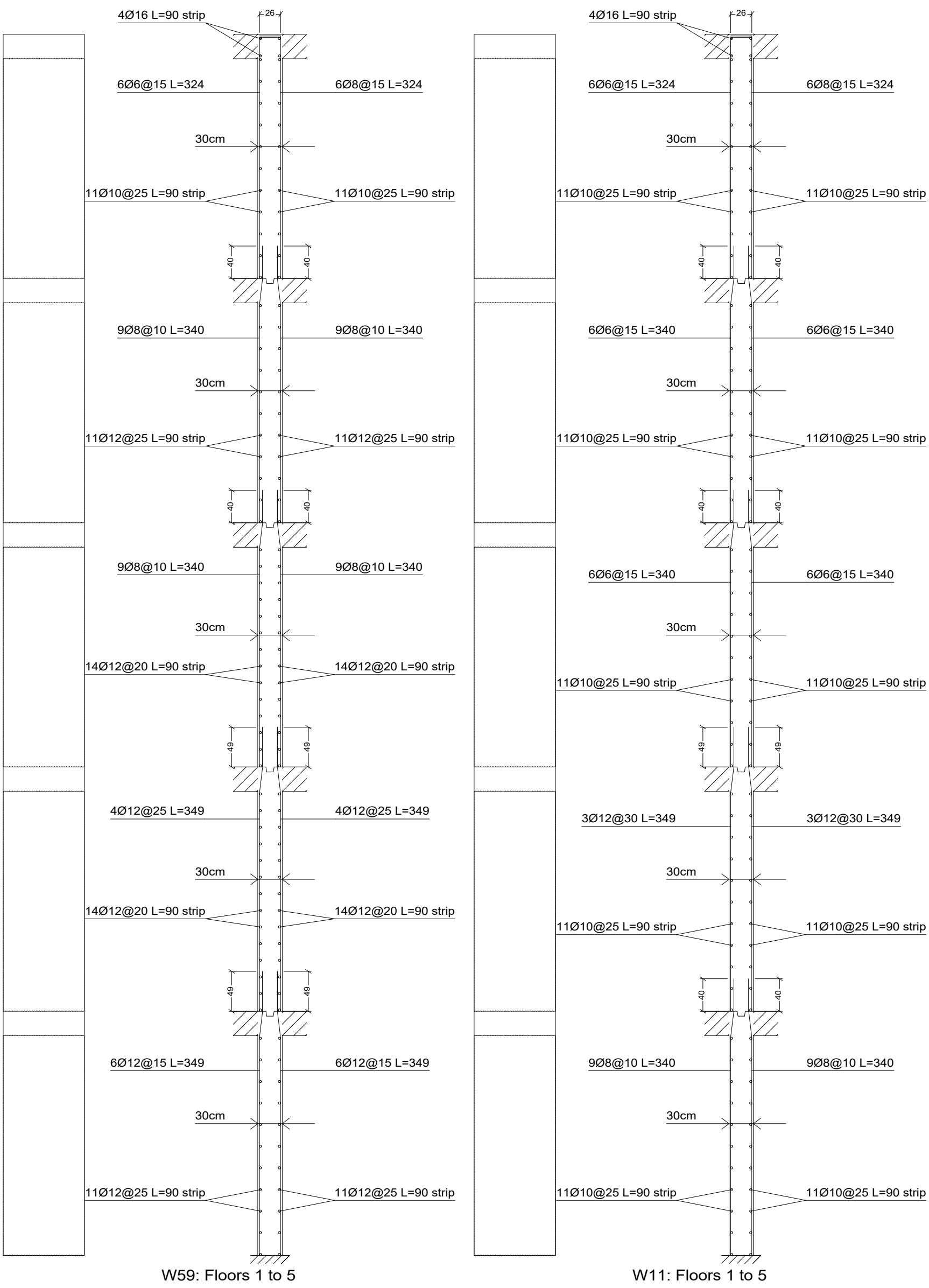
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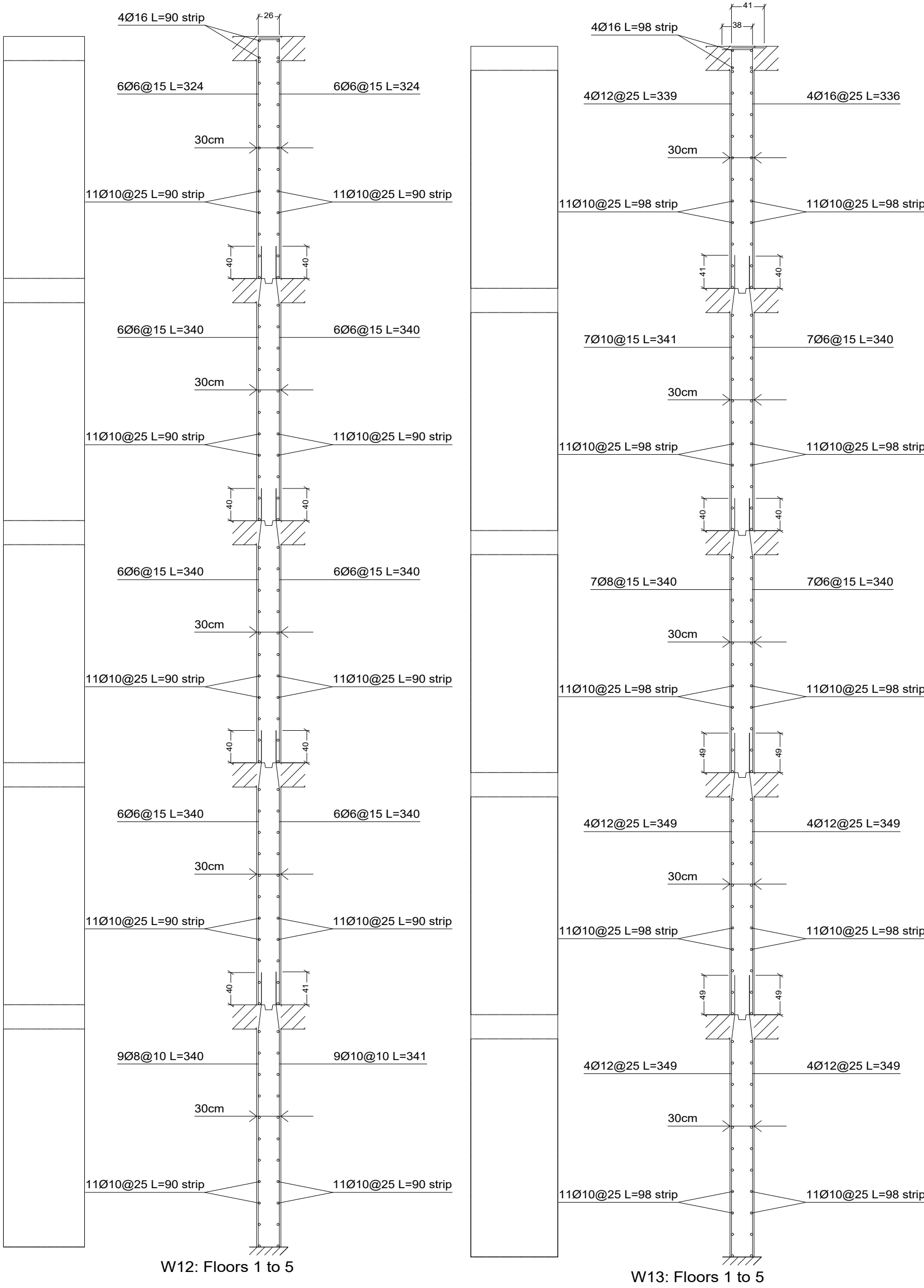
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A246	
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Scale: 1:50
edificio 2.0
Local additional opening
reinforcement is not shown.



Scale: 1:50
edificio 2.0
Local additional opening
reinforcement is not shown.



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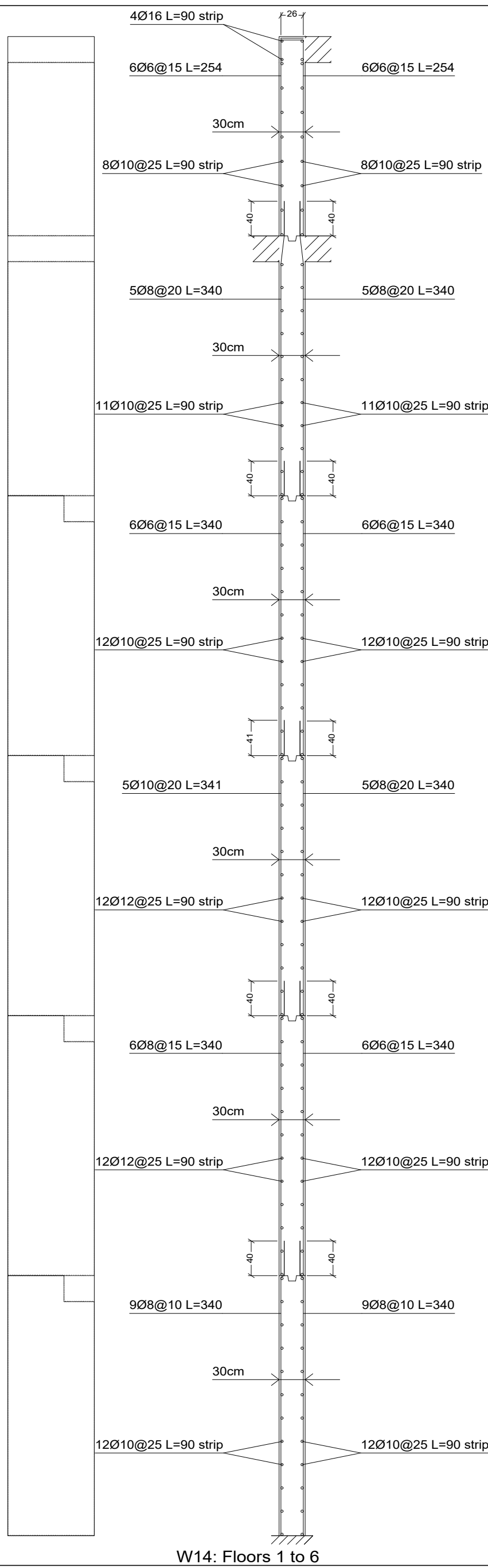
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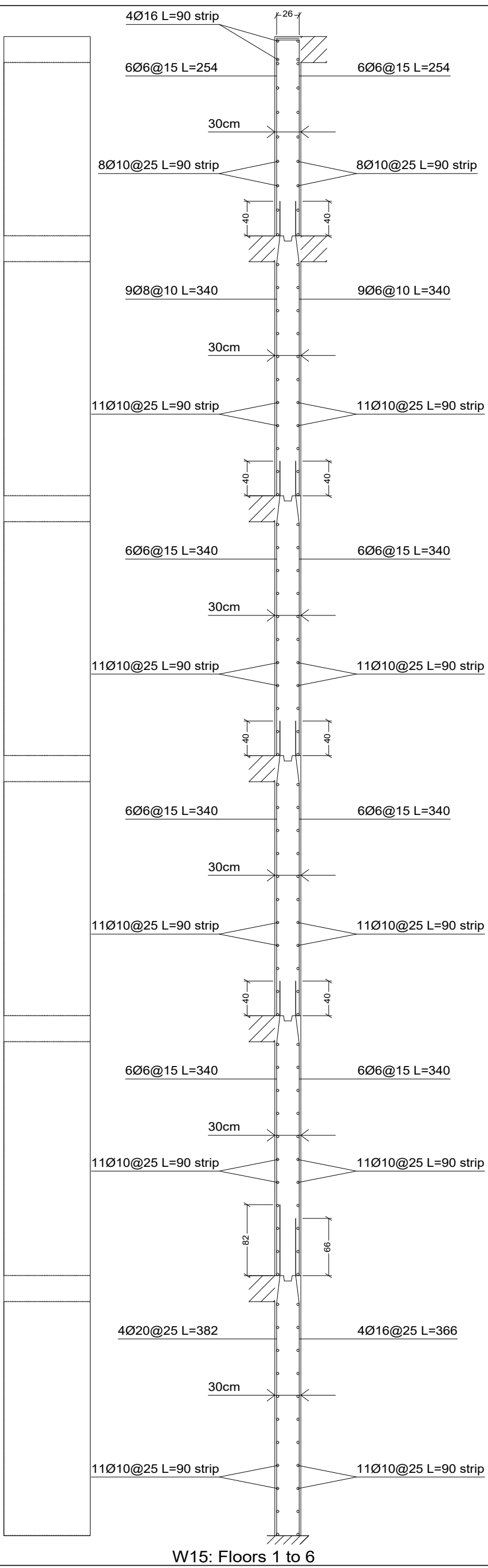
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W14: Floors 1 to 6



W15: Floors 1 to 6

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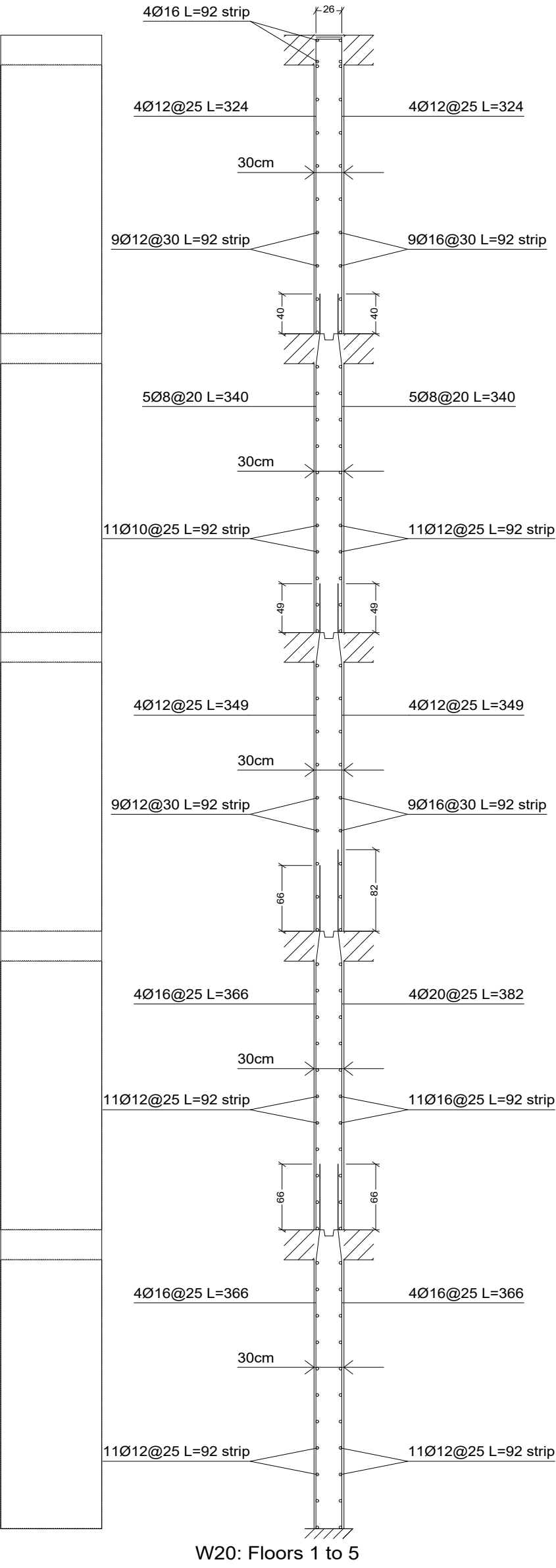
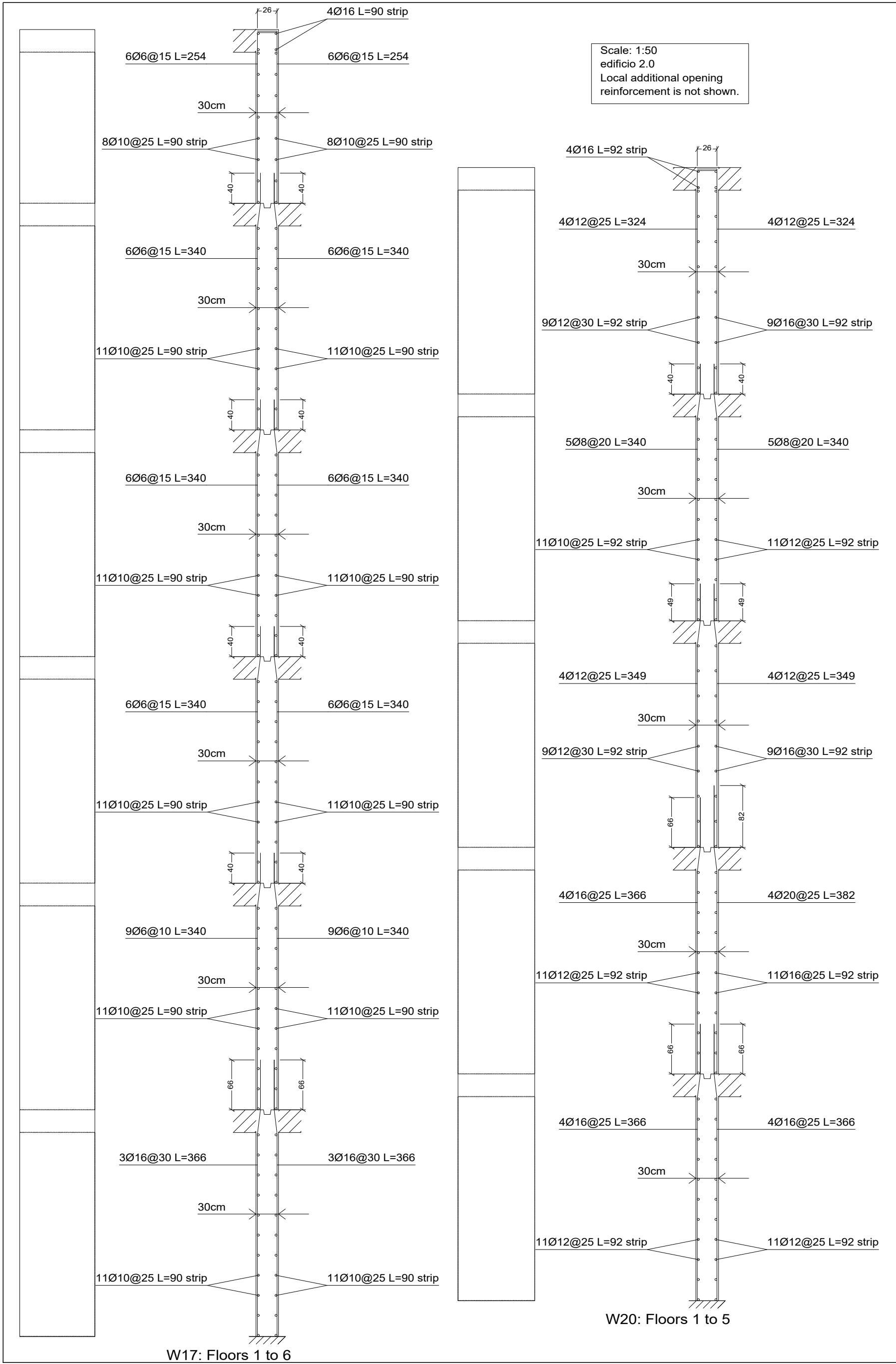
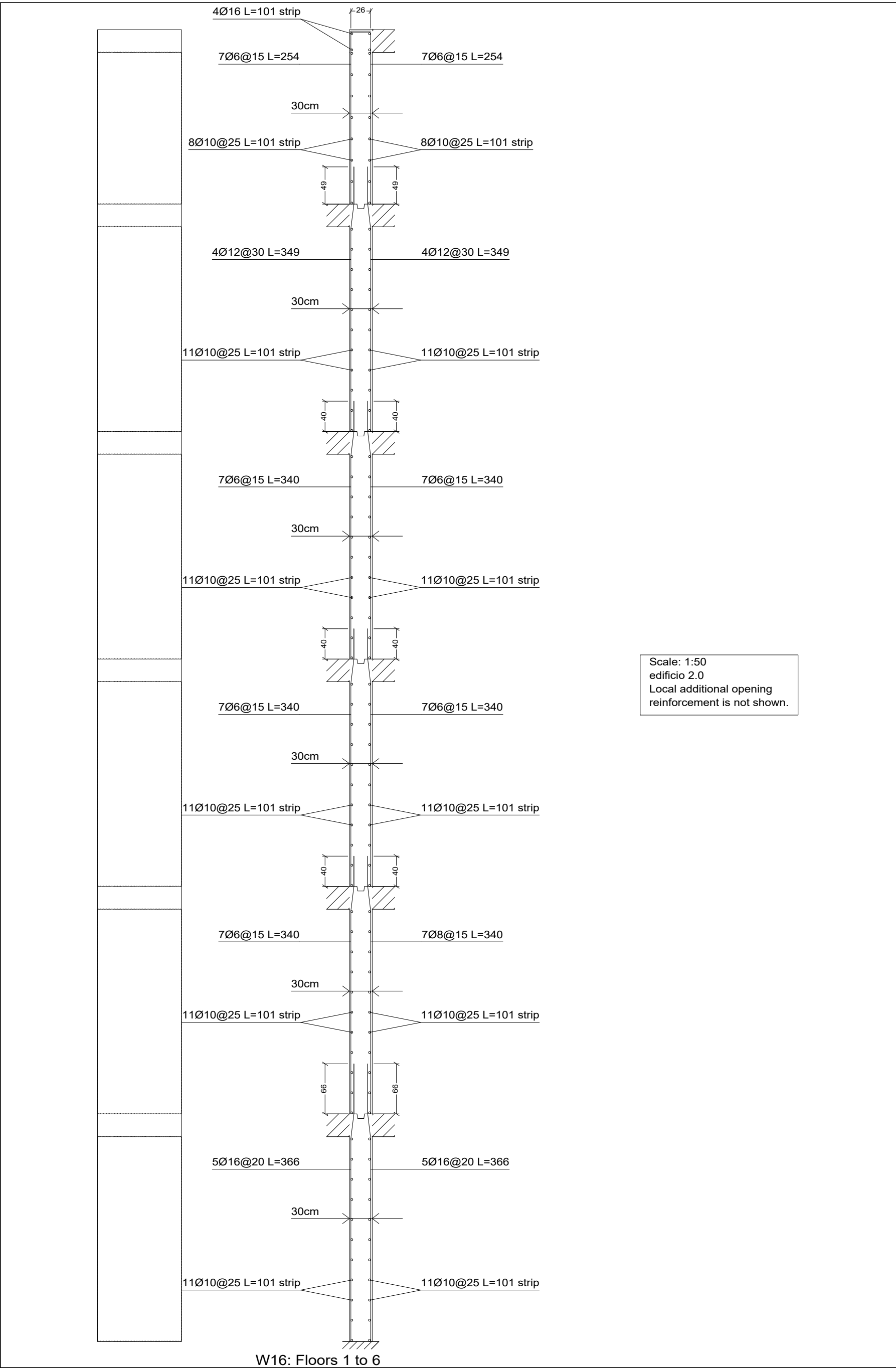
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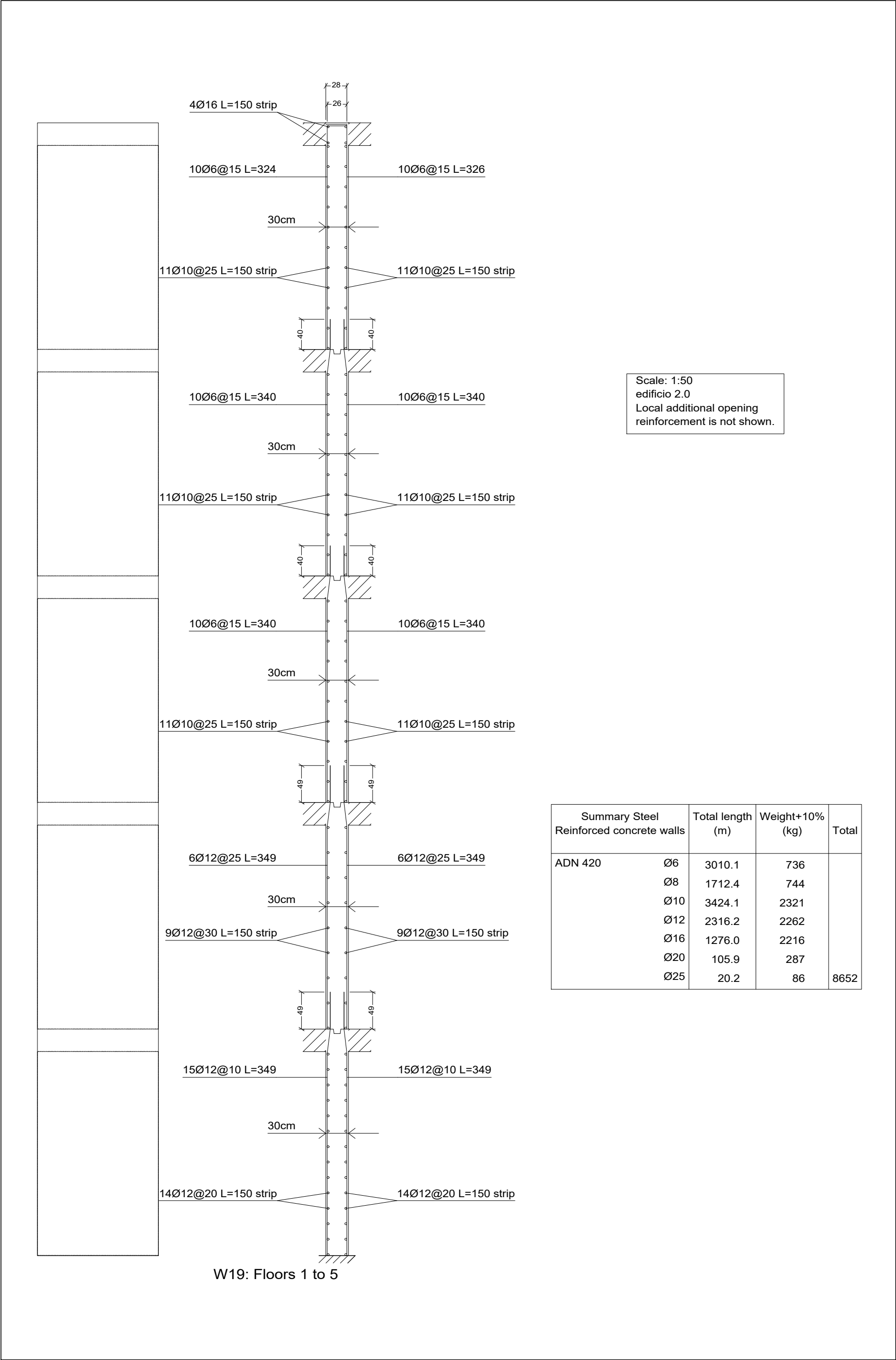
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Scale1 : 50



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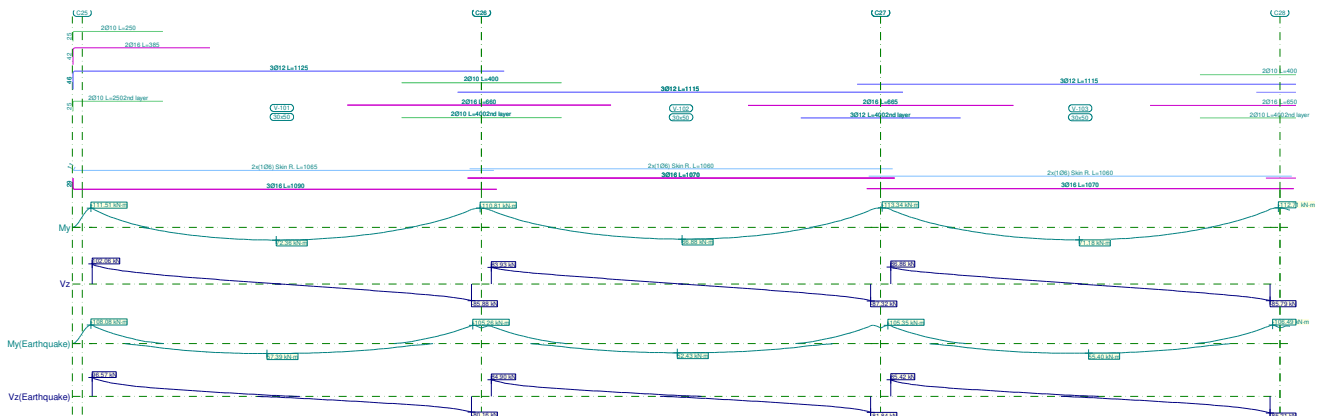
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1.- FLOORS 1 TO 4

1.1.- Frame 1

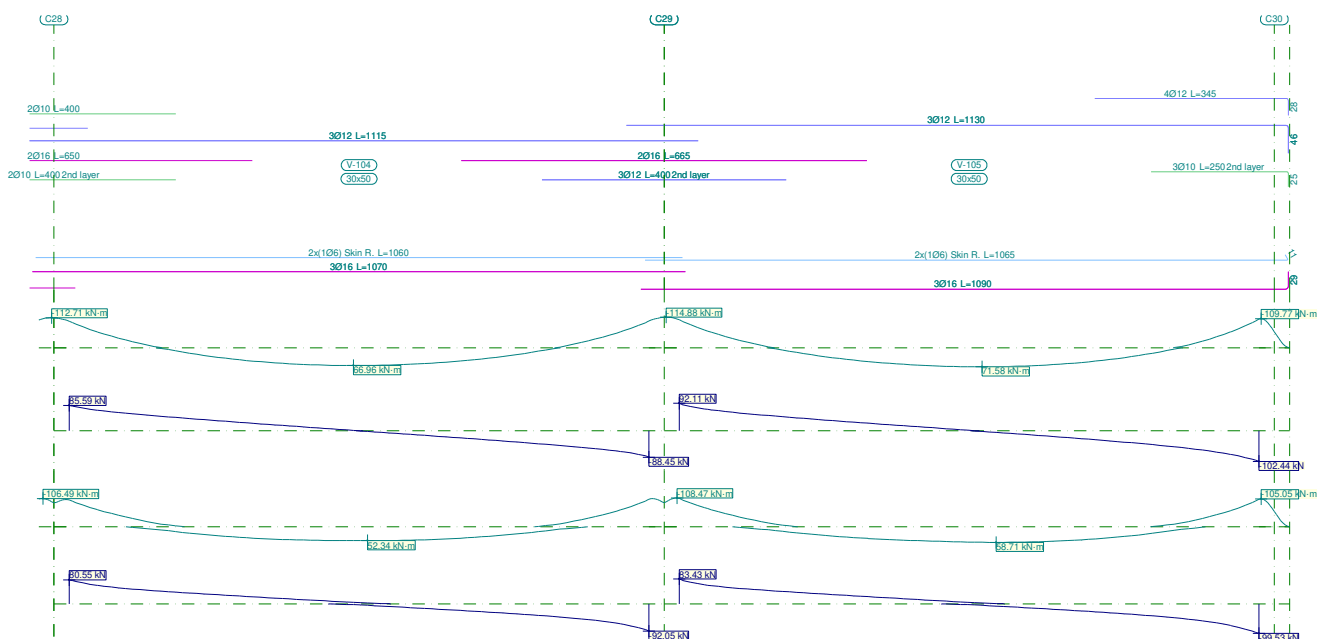


Frame 1			Span: V-101			Span: V-102			Span: V-103		
Section			30x50			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-109.97	--	-102.98	-97.87	--	-101.50	-104.37	--	-104.71
		[m]	0.00	--	9.50	0.00	--	9.50	0.00	--	9.50
	Max Moment	[kN·m]	58.19	72.36	54.11	51.10	66.88	51.53	53.91	71.18	54.69
		[m]	3.09	4.61	6.36	3.14	4.78	6.41	3.09	4.73	6.36
	Min Shear	[kN]	--	-22.55	-85.88	--	-22.35	-87.32	--	-21.91	-85.79
		[m]	--	6.24	9.50	--	6.29	9.50	--	6.24	9.50
	Max Shear	[kN]	102.06	21.42	--	83.93	21.26	--	86.86	22.31	--
		[m]	0.00	3.21	--	0.00	3.26	--	0.00	3.21	--
	Min Torsion	[kN]	--	--	-3.54	--	--	-4.52	--	--	-4.49
		[m]	--	--	9.39	--	--	9.44	--	--	9.39
	Max Torsion	[kN]	7.41	--	--	2.60	--	--	5.32	--	--
		[m]	0.00	--	--	0.00	--	--	0.00	--	--



Beam reinforcement report

Frame 1				Span: V-101			Span: V-102			Span: V-103		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-106.66	--	-103.62	-100.23	--	-103.20	-103.37	--	-104.35
		x		[m]	0.00	--	9.50	0.00	--	9.50	0.00	--
	Max Moment	[kN·m]		50.44	57.39	45.39	43.56	52.43	43.63	45.54	55.40	46.09
		x		[m]	3.09	4.38	6.36	3.14	4.66	6.41	3.09	4.96
	Min Shear	[kN]		--	-21.31	-80.16	--	-21.21	-81.84	--	-20.40	-85.21
		x		[m]	--	6.24	9.50	--	6.29	9.50	--	6.24
	Max Shear	[kN]		96.57	20.21	--	84.90	20.35	--	85.42	20.76	--
		x		[m]	0.00	3.21	--	0.00	3.26	--	0.00	3.21
	Min Torsion	[kN]		--	--	-4.59	--	--	-5.91	--	--	-4.75
		x		[m]	--	--	9.39	--	--	9.44	--	--
	Max Torsion	[kN]		7.35	--	--	3.42	--	--	5.45	--	--
		x		[m]	0.00	--	--	0.00	--	--	0.00	--
Top Reinf. Area		[cm²]	Real	10.56	3.39	12.60	12.43	3.39	12.85	12.64	3.39	12.60
			Req.	9.86	3.49	9.83	9.31	3.55	10.07	10.08	3.55	9.95
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	7.07	7.41	6.03	7.07	7.07	6.03	7.07
			Req.	5.28	4.66	6.30	6.21	4.66	6.42	6.32	4.66	6.30
Transv. Reinf. Area		[cm²/m]	Real	3.77	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	3.43	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				5.87 mm, L/1618 (L: 9.50 m)			5.03 mm, L/1889 (L: 9.50 m)			5.46 mm, L/1741 (L: 9.50 m)		



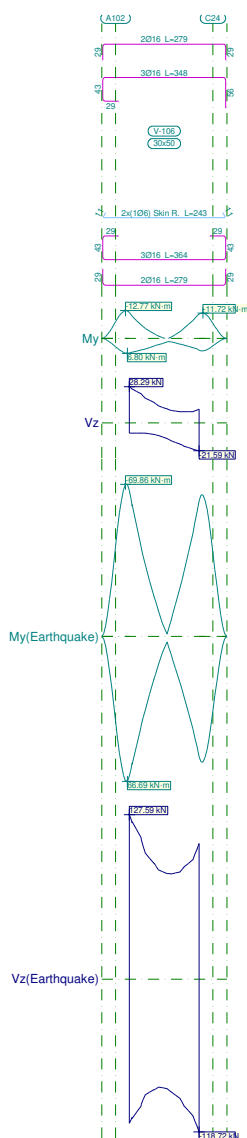


Beam reinforcement report

Frame 1				Span: V-104			Span: V-105		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment. x	[kN·m]		-99.88	--	-101.05	-105.58	--	-108.19
		[m]		0.00	--	9.50	0.00	--	9.50
	Max Moment x	[kN·m]		52.75	66.96	50.13	51.98	71.58	59.85
		[m]		3.14	4.66	6.41	3.09	4.96	6.36
	Min Shear x	[kN]		--	-22.02	-88.45	--	-20.87	-102.44
		[m]		--	6.29	9.50	--	6.24	9.50
	Max Shear x	[kN]		85.59	21.57	--	92.11	23.92	--
		[m]		0.00	3.26	--	0.00	3.21	--
	Min Torsion x	[kN]		--	--	-4.01	--	--	-5.71
		[m]		--	--	9.44	--	--	9.39
Max Torsion x	[kN]		3.68	--	--	4.14	--	--	
	[m]		0.00	--	--	0.00	--	--	
Seismic situations	Min Moment. x	[kN·m]		-100.66	--	-103.72	-106.81	--	-103.53
		[m]		0.00	--	9.50	0.00	--	9.50
	Max Moment x	[kN·m]		44.36	52.34	43.08	44.13	58.71	52.24
		[m]		3.14	4.89	6.41	3.09	5.19	6.36
	Min Shear x	[kN]		--	-20.91	-92.05	--	-19.61	-99.53
		[m]		--	6.29	9.50	--	6.24	9.50
	Max Shear x	[kN]		80.55	20.49	--	83.43	22.54	--
		[m]		0.00	3.26	--	0.00	3.21	--
	Min Torsion x	[kN]		--	--	-4.79	-1.83	--	-6.53
		[m]		--	--	9.44	0.00	--	9.39
Max Torsion x	[kN]		4.99	--	--	6.65	--	1.53	
	[m]		0.00	--	--	0.00	--	7.76	
Top Reinf. Area		[cm²]	Real	12.38	3.39	12.98	12.64	3.39	10.27
			Req.	9.93	3.55	10.16	10.18	3.55	9.77
Bot. Reinf. Area		[cm²]	Real	7.07	6.03	7.41	7.07	6.03	6.03
			Req.	6.19	4.66	6.49	6.32	4.66	5.14
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	2.45	2.45	2.45	2.45	2.45	2.94
Active Defl.				5.03 mm, L/1889 (L: 9.50 m)			5.93 mm, L/1602 (L: 9.50 m)		



1.2.- Frame 2



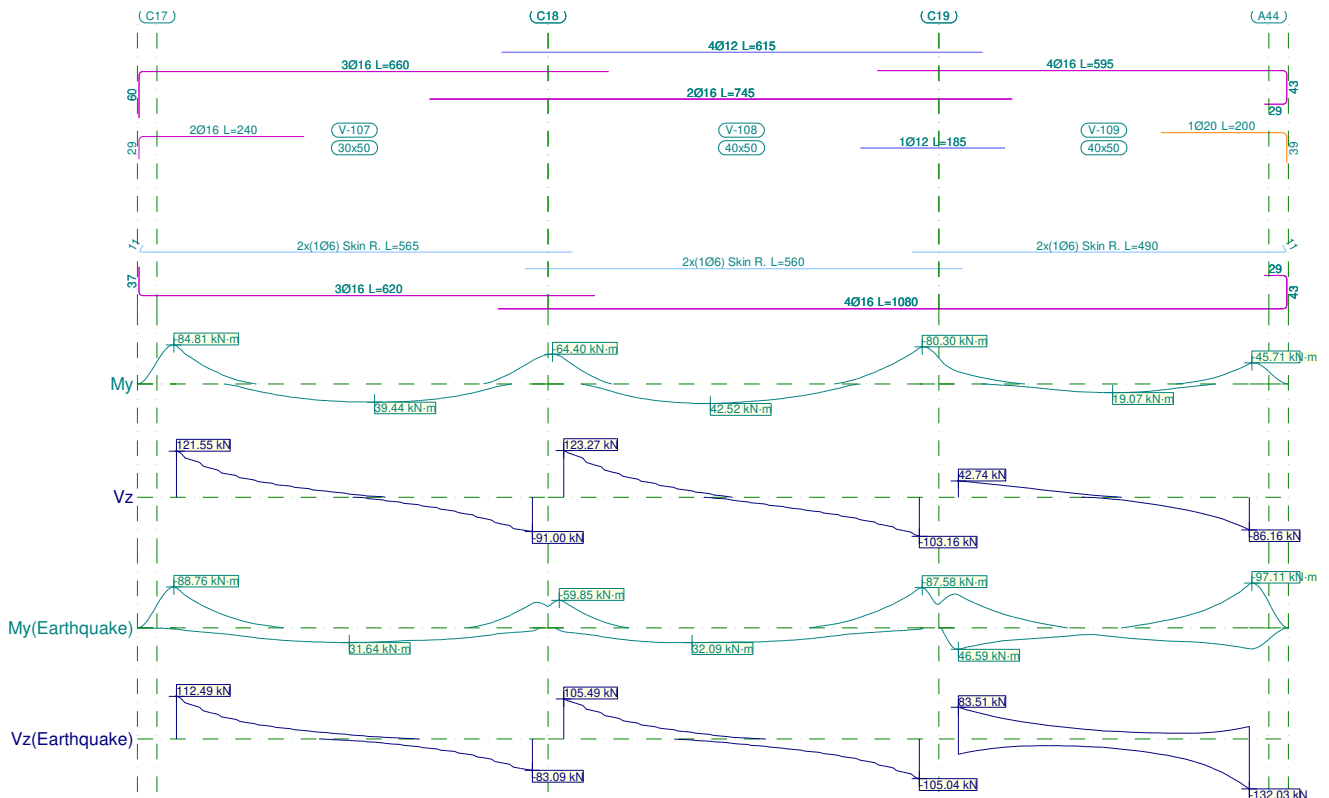
Frame 2			Span: V-106		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-11.95	-2.18	-11.21
		[m]	0.00	0.44	1.25
	Max Moment	[kN·m]	6.66	3.47	5.40
		[m]	0.00	0.44	1.25
	Min Shear	[kN]	-8.40	-15.03	-21.59
		[m]	0.36	0.83	1.25
	Max Shear	[kN]	28.29	15.93	10.85
		[m]	0.00	0.44	1.25
	Min Torsion	[kN]	-1.47	--	--
		[m]	0.05	--	--
	Max Torsion	[kN]	2.79	2.96	2.72
		[m]	0.21	0.44	0.91



Beam reinforcement report

Frame 2				Span: V-106		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-66.95	-18.36	-62.19
		[m]		0.00	0.44	1.25
	Max Moment x	[kN·m]		64.18	19.58	55.32
		[m]		0.00	0.44	1.25
	Min Shear x	[kN]		-111.92	-90.11	-118.72
		[m]		0.00	0.83	1.25
	Max Shear x	[kN]		127.59	90.11	105.43
		[m]		0.00	0.44	1.25
	Min Torsion x	[kN]		-2.91	--	-2.03
		[m]		0.00	--	1.22
Max Torsion x	[kN]		3.85	2.91	4.04	
	[m]		0.00	0.44	1.14	
Top Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	7.26	7.09	6.97
Bot. Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	6.92	6.92	6.40
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.25 m)		

1.3.- Frame 3



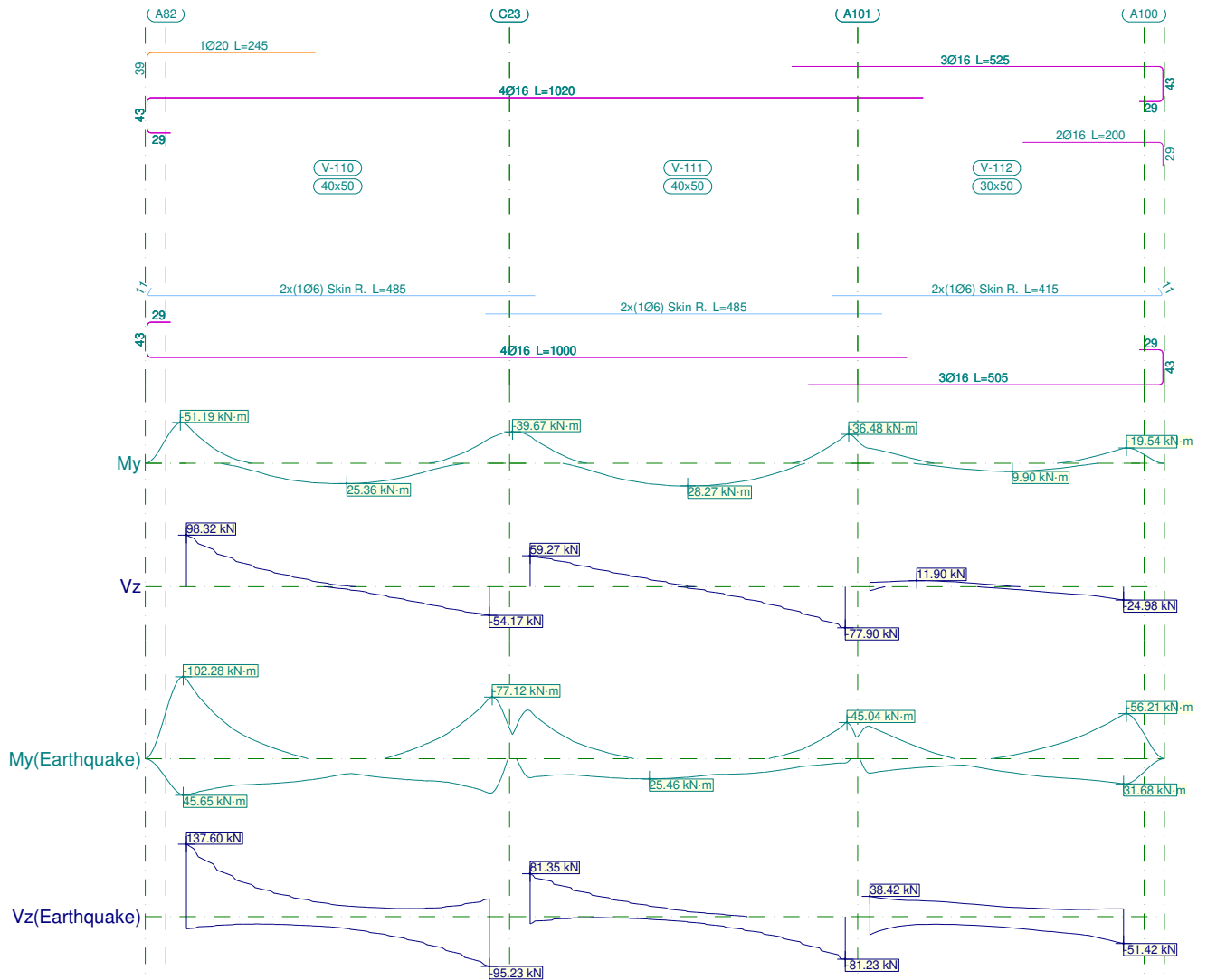


Beam reinforcement report

Frame 3				Span: V-107			Span: V-108			Span: V-109		
Section				30x50			40x50			40x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-82.27	--	-50.60	-55.59	--	-77.93	-26.52	--	-43.83
		x	[m]	0.00	--	4.55	0.00	--	4.55	0.00	--	3.72
	Max Moment	[kN·m]		29.62	39.44	36.41	40.43	42.52	25.83	11.35	19.07	14.17
		x	[m]	1.51	2.53	3.09	1.46	1.88	3.04	1.15	1.97	2.55
	Min Shear	[kN]		--	-18.10	-91.00	--	-29.60	-103.16	--	-17.10	-86.16
		x	[m]	--	3.00	4.55	--	2.95	4.55	--	2.44	3.72
	Max Shear	[kN]		121.55	23.98	--	123.27	19.26	--	42.74	14.96	--
		x	[m]	0.00	1.60	--	0.00	1.55	--	0.00	1.27	--
	Min Torsion	[kN]		--	--	-2.41	-2.86	-1.38	-2.49	-2.10	--	--
		x	[m]	--	--	4.31	0.06	1.55	4.49	0.00	--	--
	Max Torsion	[kN]		4.02	4.79	7.31	9.62	4.83	3.03	--	--	7.07
		x	[m]	0.53	2.86	4.03	0.00	1.64	3.98	--	--	3.60
Seismic situations	Min Moment.	[kN·m]		-86.56	--	-53.28	-57.24	--	-86.22	-71.72	-9.30	-94.43
		x	[m]	0.00	--	4.55	0.00	--	4.55	0.00	2.44	3.72
	Max Moment	[kN·m]		28.37	31.64	27.00	32.07	32.12	24.85	46.59	25.76	45.30
		x	[m]	1.51	2.21	3.09	1.41	1.64	3.04	0.00	2.44	3.72
	Min Shear	[kN]		--	-18.46	-83.09	-1.01	-28.15	-105.04	-40.58	-35.37	-132.03
		x	[m]	--	3.00	4.55	1.46	2.95	4.55	0.00	2.44	3.72
	Max Shear	[kN]		112.49	22.86	0.22	105.49	19.43	--	83.51	32.86	32.57
		x	[m]	0.00	1.60	3.09	0.00	1.55	--	0.00	1.27	3.72
	Min Torsion	[kN]		-2.90	--	-2.77	-4.41	--	-5.12	-4.23	-1.47	--
		x	[m]	0.00	--	4.31	0.06	--	4.49	0.00	1.27	--
	Max Torsion	[kN]		3.61	3.61	5.94	11.17	3.64	3.67	2.10	--	8.59
		x	[m]	0.29	2.86	4.26	0.00	1.64	4.44	0.00	--	3.60
Top Reinf. Area		[cm ²]	Real	10.06	6.20	13.17	13.11	8.55	15.35	15.25	8.04	11.19
			Req.	8.40	4.56	6.93	7.86	6.09	9.24	6.08	6.08	9.78
Bot. Reinf. Area		[cm ²]	Real	6.03	6.03	12.08	12.20	8.04	8.04	8.04	8.04	8.04
			Req.	5.33	5.47	6.59	6.55	6.55	7.68	7.62	6.08	6.72
Transv. Reinf. Area		[cm ² /m]	Real	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	2.63	2.45	2.45	3.26	3.26	3.26	3.26	3.26	3.26
Active Defl.				0.62 mm, L/6997 (L: 4.35 m)			0.44 mm, L/9780 (L: 4.26 m)			0.10 mm, L/37037 (L: 3.67 m)		



1.4.- Frame 4



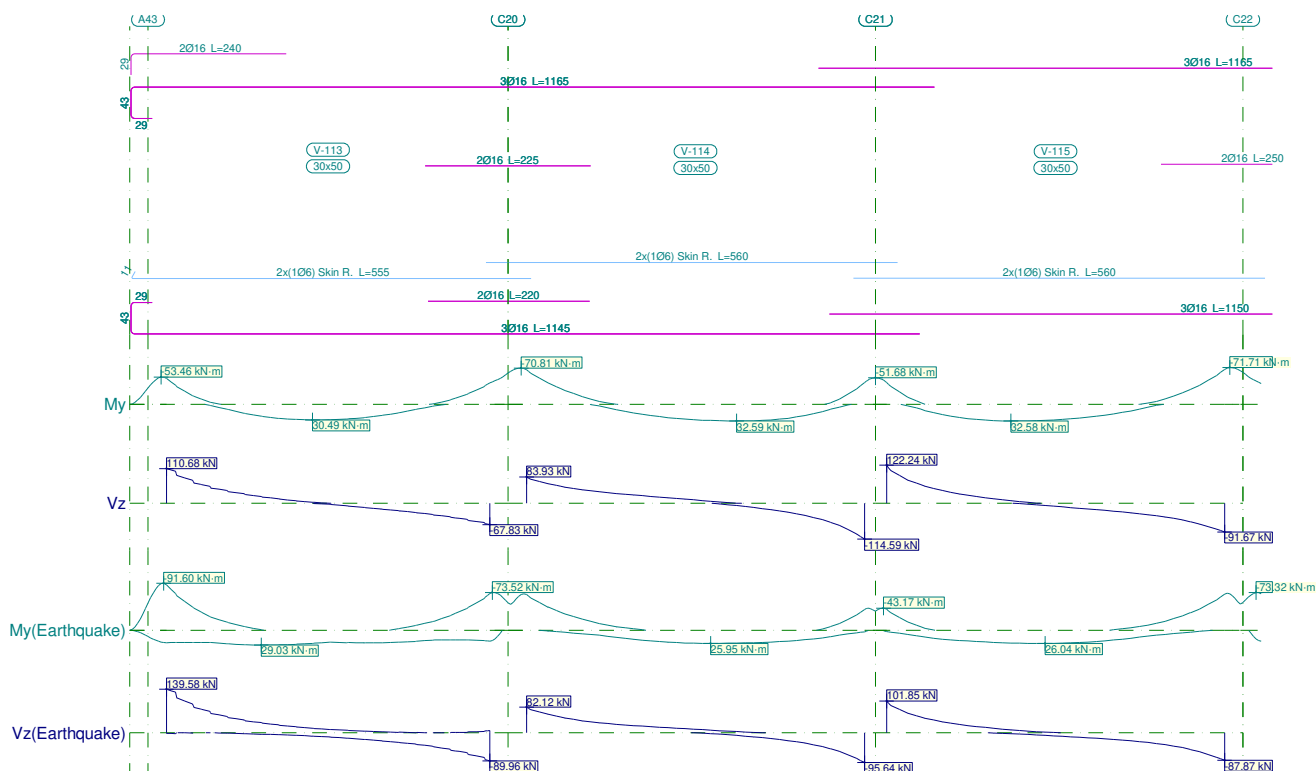


Beam reinforcement report

Frame 4				Span: V-110			Span: V-111			Span: V-112		
Section				40x50			40x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-48.73	--	-30.80	-33.91	--	-35.11	-18.93	--	-19.05
		x	[m]	0.00	--	3.70	0.00	--	3.85	0.00	--	3.10
	Max Moment	[kN·m]		18.42	25.36	20.68	21.75	28.27	22.33	4.52	9.90	8.12
		x	[m]	1.17	1.96	2.48	1.23	1.93	2.60	0.92	1.74	2.09
	Min Shear	[kN]		--	-17.96	-54.17	--	-18.08	-77.90	-7.68	-7.49	-24.98
		x	[m]	--	2.45	3.70	--	2.50	3.85	0.00	1.97	3.10
	Max Shear	[kN]		98.32	21.76	--	59.27	18.22	--	11.90	9.40	--
		x	[m]	0.00	1.26	--	0.00	1.33	--	0.57	1.04	--
	Min Torsion	[kN]		-8.33	-2.66	-3.11	-4.96	-5.51	-5.61	-9.41	-1.51	--
		x	[m]	0.09	1.26	3.36	1.20	2.37	2.83	0.00	1.04	--
	Max Torsion	[kN]		2.29	2.35	1.95	1.83	--	7.93	--	--	8.61
		x	[m]	1.08	1.54	2.48	0.00	--	3.79	--	--	2.91
Seismic situations	Min Moment.	[kN·m]		-99.50	-6.58	-75.51	-59.88	--	-44.39	-40.57	-9.33	-55.44
		x	[m]	0.00	1.26	3.70	0.00	--	3.85	0.00	1.97	3.10
	Max Moment	[kN·m]		45.61	29.55	43.37	25.17	25.46	19.09	18.35	20.91	31.68
		x	[m]	0.00	1.26	3.70	1.23	1.46	2.60	0.00	1.97	3.10
	Min Shear	[kN]		-23.07	-35.20	-95.23	-13.78	-22.28	-81.23	-34.66	-25.12	-51.42
		x	[m]	0.00	2.45	3.70	0.00	2.50	3.85	0.00	1.97	3.10
	Max Shear	[kN]		137.60	39.37	33.95	81.35	23.83	1.23	38.42	26.32	15.42
		x	[m]	0.00	1.26	3.70	0.00	1.33	2.60	0.00	1.04	2.09
	Min Torsion	[kN]		-8.34	-3.00	-3.98	-4.04	-4.36	-4.52	-8.07	-1.59	--
		x	[m]	0.09	1.26	3.59	0.50	2.37	2.83	0.00	1.04	--
	Max Torsion	[kN]		2.50	2.12	3.97	4.40	--	9.25	--	--	8.79
		x	[m]	0.00	2.24	3.64	0.00	--	3.79	--	--	2.91
Top Reinf. Area		[cm²]	Real	11.19	9.09	8.04	8.04	8.04	13.24	12.92	6.60	10.06
			Req.	10.09	6.08	6.08	6.08	6.08	6.74	6.14	4.56	6.45
Bot. Reinf. Area		[cm²]	Real	8.04	8.04	8.04	8.04	8.04	12.78	12.29	6.03	6.03
			Req.	6.73	6.08	6.08	6.08	6.08	6.62	6.46	4.56	5.03
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	3.33	3.33	3.33	3.33	2.46	3.33
			Req.	3.26	3.26	3.26	3.26	3.26	3.26	3.05	2.45	2.79
Active Defl.				0.16 mm, L/23018 (L: 3.70 m)			0.23 mm, L/16682 (L: 3.85 m)			0.06 mm, L/33485 (L: 1.94 m)		



1.5.- Frame 5



Frame 5			Span: V-113			Span: V-114			Span: V-115		
Section			30x50			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-50.60	--	-41.70	-67.56	--	-42.74	-42.84	--	-68.07
		[m]	0.00	--	4.40	0.00	--	4.60	0.00	--	4.60
	Max Moment	[kN·m]	25.34	30.49	21.28	16.69	32.59	32.20	31.76	32.58	18.51
		[m]	1.42	1.99	2.94	1.46	2.86	3.09	1.46	1.69	3.09
	Min Shear	[kN]	--	-18.38	-67.83	--	-10.12	-114.59	--	-22.48	-91.67
		[m]	--	2.93	4.40	--	2.98	4.60	--	2.98	4.60
	Max Shear	[kN]	110.68	15.22	--	83.93	24.56	--	122.24	11.66	--
		[m]	0.00	1.52	--	0.00	1.58	--	0.00	1.58	--
	Min Torsion	[kN]	-9.75	-2.63	--	-1.94	--	--	-2.77	--	--
		[m]	0.12	1.52	--	0.00	--	--	0.00	--	--
	Max Torsion	[kN]	--	--	2.62	--	--	1.90	--	--	--
		[m]	--	--	4.34	--	--	4.49	--	--	--

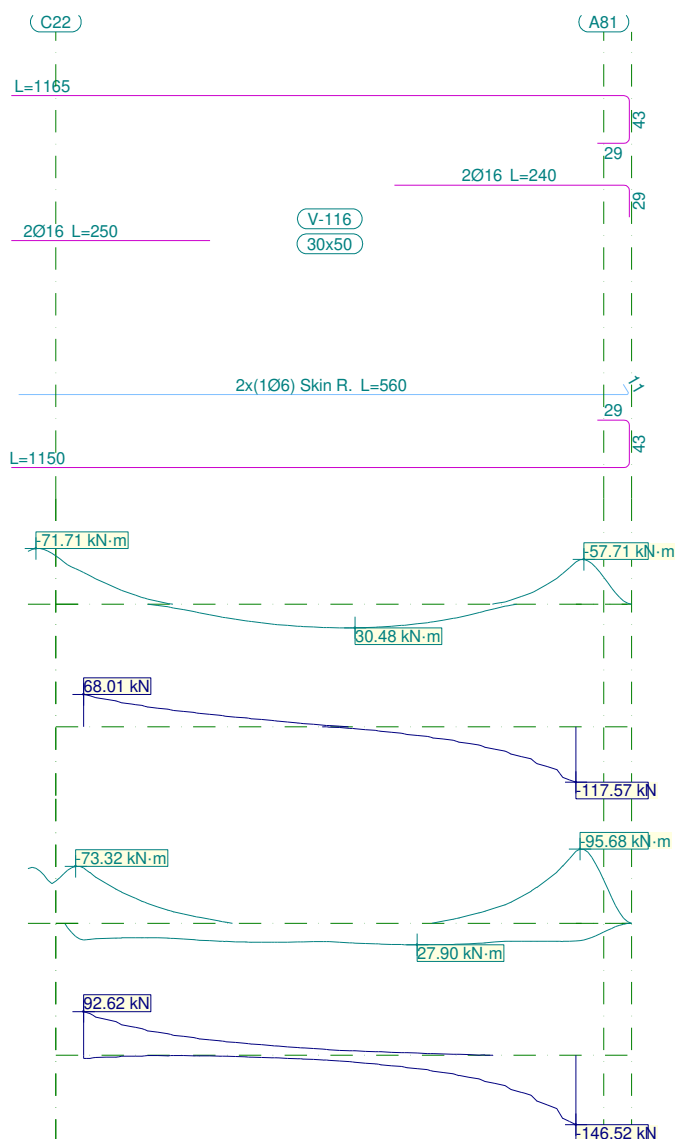


Beam reinforcement report

Frame 5				Span: V-113			Span: V-114			Span: V-115		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-88.59	--	-71.46	-69.80	--	-40.56	-40.77	--	-70.48
		x		[m]	0.00	--	4.40	0.00	--	4.60	0.00	--
	Max Moment	[kN·m]		29.03	28.74	24.40	17.87	25.95	24.43	23.89	26.04	19.19
		x		[m]	1.29	1.52	2.94	1.46	2.51	3.09	1.46	2.16
	Min Shear	[kN]		-5.54	-25.91	-89.96	--	-10.69	-95.64	-0.72	-19.59	-87.87
		x		[m]	1.42	2.93	4.40	--	2.98	4.60	1.46	2.98
	Max Shear	[kN]		139.58	125.62	6.89	82.12	21.34	1.55	101.85	11.79	--
		x		[m]	0.00	1.52	4.40	0.00	1.58	3.09	0.00	1.58
	Min Torsion	[kN]		-10.13	-2.64	-3.01	-3.73	--	-2.04	-5.52	--	--
		x		[m]	0.12	1.52	4.32	0.00	--	4.49	0.00	--
	Max Torsion	[kN]		--	--	4.39	2.06	--	3.77	2.99	--	1.74
		x		[m]	--	--	4.34	0.00	--	4.49	0.00	--
Top Reinf. Area		[cm²]	Real	10.06	6.61	10.06	10.06	6.03	11.00	11.21	6.03	10.06
			Req.	8.57	4.56	7.48	7.34	4.56	5.71	5.73	4.56	4.66
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	10.06	10.06	6.03	10.98	10.74	6.03	6.03
			Req.	5.03	4.56	5.03	5.03	4.56	5.50	5.61	4.56	5.03
Transv. Reinf. Area		[cm²/m]	Real	5.66	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	4.92	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.41 mm, L/10808 (L: 4.40 m)			0.43 mm, L/9227 (L: 3.96 m)			0.46 mm, L/9062 (L: 4.13 m)		



Beam reinforcement report



Frame 5			Span: V-116		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-40.93	--	-54.63
	x	[m]	0.00	--	4.43
	Max Moment	[kN·m]	21.47	30.48	25.41
	x	[m]	1.46	2.44	3.00
	Min Shear	[kN]	--	-16.19	-117.57
	x	[m]	--	2.91	4.43
	Max Shear	[kN]	68.01	17.72	--
	x	[m]	0.00	1.48	--
	Min Torsion	[kN]	-2.52	-2.53	-4.50
	x	[m]	0.06	2.86	4.03
	Max Torsion	[kN]	--	--	6.74
	x	[m]	--	--	4.31

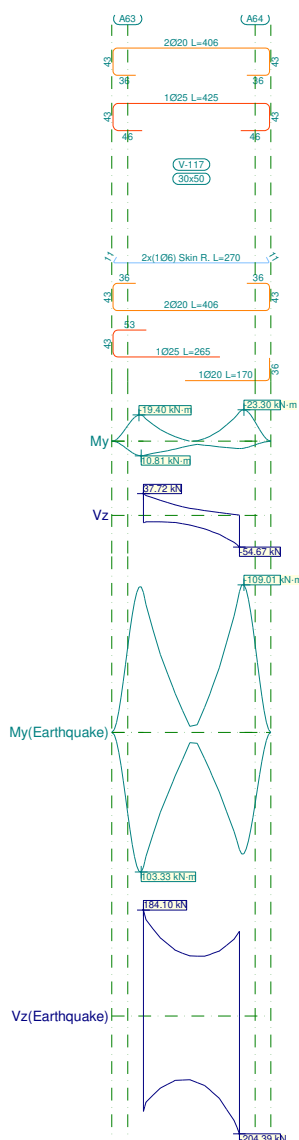


Beam reinforcement report

Frame 5				Span: V-116		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-71.08	--	-92.52
	x	[m]		0.00	--	4.43
	Max Moment	[kN·m]		24.27	27.78	27.90
	x	[m]		1.46	2.91	3.00
	Min Shear	[kN]		-6.60	-25.90	-146.52
	x	[m]		0.00	2.91	4.43
	Max Shear	[kN]		92.62	24.78	4.73
	x	[m]		0.00	1.48	3.00
	Min Torsion	[kN]		-3.17	-2.43	-5.26
	x	[m]		0.06	2.86	4.03
Max Torsion	[kN]		1.53	--	7.01	
x	[m]		0.00	--	4.31	
Top Reinf. Area		[cm²]	Real	10.06	6.63	10.06
			Req.	7.47	4.56	8.81
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.03	4.56	5.03
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	5.66
			Req.	2.45	2.45	5.01
Active Defl.				0.41 mm, L/10678 (L: 4.43 m)		



1.6.- Frame 6



Frame 6			Span: V-117		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-18.44	-1.93	-21.63
	x	[m]	0.00	0.97	1.52
	Max Moment	[kN·m]	10.57	4.42	5.38
	x	[m]	0.00	0.62	1.52
	Min Shear	[kN]	-12.75	-23.33	-54.67
	x	[m]	0.00	0.97	1.52
	Max Shear	[kN]	37.72	15.20	7.33
	x	[m]	0.00	0.62	1.05
	Min Torsion	[kN]	-2.78	--	--
	x	[m]	0.00	--	--
	Max Torsion	[kN]	--	--	2.19
	x	[m]	--	--	1.44

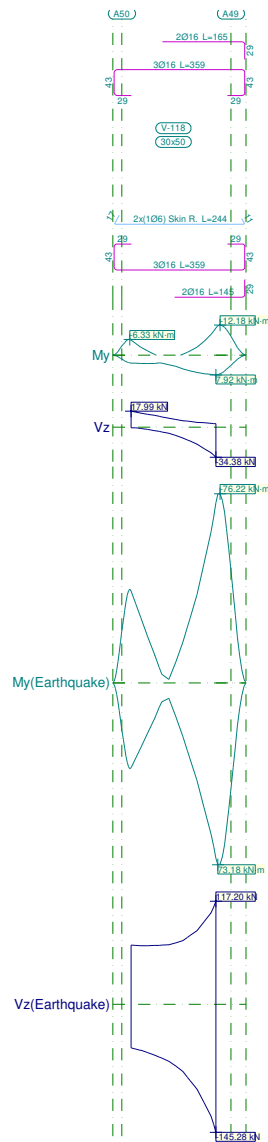


Beam reinforcement report

Frame 6				Span: V-117		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-103.37	-18.27	-104.05
		[m]		0.00	0.97	1.52
	Max Moment x	[kN·m]		99.70	20.12	86.78
		[m]		0.00	0.62	1.52
	Min Shear x	[kN]		-165.22	-120.44	-204.39
		[m]		0.00	0.97	1.52
	Max Shear x	[kN]		184.10	109.02	147.24
		[m]		0.00	0.62	1.52
	Min Torsion x	[kN]		-6.28	--	-2.36
		[m]		0.00	--	1.44
Max Torsion x	[kN]		4.55	--	4.15	
	[m]		0.00	--	1.44	
Top Reinf. Area		[cm²]	Real	11.19	11.19	11.19
			Req.	9.59	5.06	9.68
Bot. Reinf. Area		[cm²]	Real	11.19	8.86	9.43
			Req.	9.10	5.60	8.30
Transv. Reinf. Area		[cm²/m]	Real	7.08	7.08	7.08
			Req.	4.74	2.45	5.99
Active Defl.				0.09 mm, L/33057 (L: 3.04 m)		



1.7.- Frame 7



Frame 7			Span: V-118		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-6.09	--	-10.98
	x	[m]	0.00	--	1.40
	Max Moment	[kN·m]	3.35	6.00	7.92
	x	[m]	0.28	0.93	1.40
	Min Shear	[kN]	-4.00	-14.60	-34.38
	x	[m]	0.39	0.93	1.40
	Max Shear	[kN]	17.99	12.16	6.34
	x	[m]	0.00	0.47	0.98
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

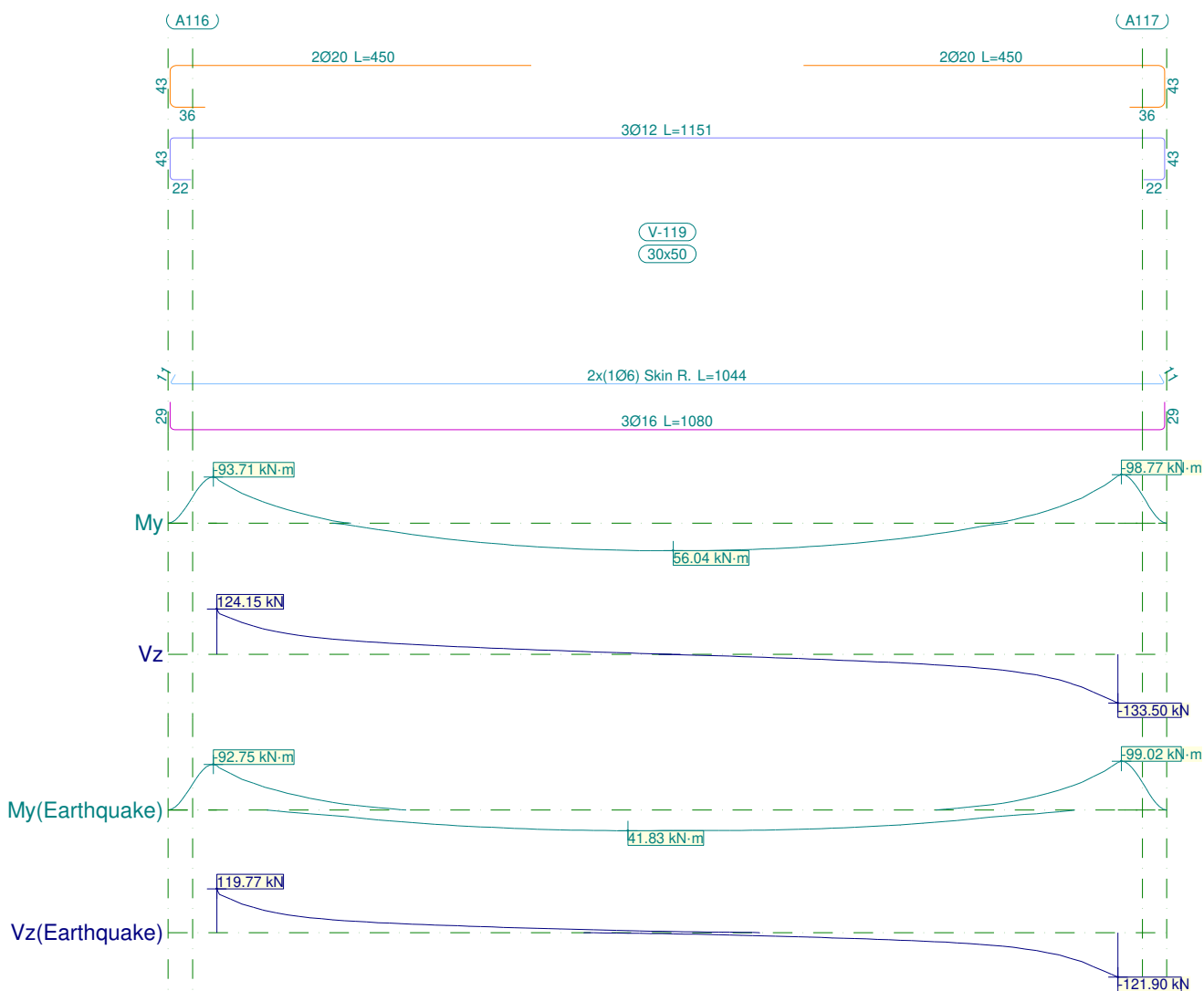


Beam reinforcement report

Frame 7				Span: V-118		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-37.04	-22.56	-72.62
	x	[m]		0.00	0.93	1.40
	Max Moment	[kN·m]		34.05	27.29	70.60
	x	[m]		0.00	0.93	1.40
	Min Shear	[kN]		-57.65	-82.76	-145.28
	x	[m]		0.39	0.93	1.40
	Max Shear	[kN]		67.38	76.14	117.20
	x	[m]		0.00	0.93	1.40
	Min Torsion	[kN]		--	--	-3.39
	x	[m]		--	--	1.33
Top Reinf. Area		[cm²]	Real	6.03	8.22	10.06
			Req.	4.56	4.66	7.64
Bot. Reinf. Area		[cm²]	Real	6.03	7.52	10.06
			Req.	4.56	4.66	7.30
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.01 mm, L/95197 (L: 1.40 m)		



1.8.- Frame 8



Frame 8			Span: V-119		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-91.22	--	-96.06
	x	[m]	0.00	--	9.27
	Max Moment	[kN·m]	44.80	56.04	46.05
	x	[m]	3.06	4.69	6.21
	Min Shear	[kN]	--	-12.73	-133.50
	x	[m]	--	6.09	9.27
	Max Shear	[kN]	124.15	13.53	--
	x	[m]	0.00	3.18	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	2.79	--	--
	x	[m]	0.00	--	--

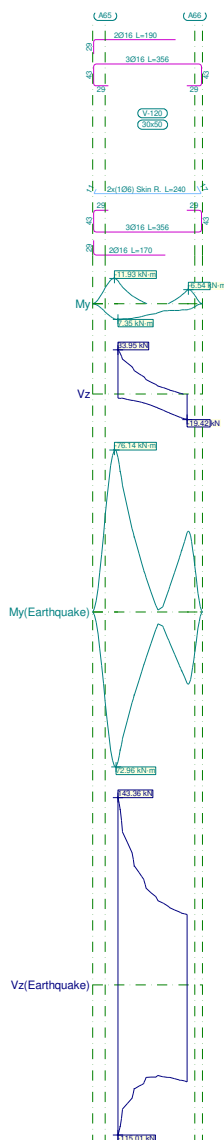


Beam reinforcement report

Frame 8				Span: V-119		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-90.38	--	-96.68
		[m]		0.00	--	9.27
	Max Moment x	[kN·m]		37.10	41.83	37.72
		[m]		3.06	4.23	6.21
	Min Shear x	[kN]		--	-12.38	-121.90
		[m]		--	6.09	9.27
	Max Shear x	[kN]		119.77	12.75	--
		[m]		0.00	3.18	--
	Min Torsion x	[kN]		-5.48	--	-2.23
		[m]		0.03	--	9.13
Max Torsion x	[kN]		7.31	--	3.01	
	[m]		0.03	--	9.13	
Top Reinf. Area		[cm²]	Real	9.68	3.79	9.68
			Req.	8.64	3.02	9.03
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.84	4.56	4.84
Transv. Reinf. Area		[cm²/m]	Real	3.33	2.46	3.33
			Req.	2.45	2.45	2.97
Active Defl.				3.91 mm, L/2367 (L: 9.27 m)		



1.9.- Frame 9



Frame 9			Span: V-120		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-10.74	--	-6.28
	x	[m]	0.00	--	1.37
	Max Moment	[kN·m]	7.35	6.05	3.27
	x	[m]	0.00	0.47	0.98
	Min Shear	[kN]	-5.90	-12.46	-19.42
	x	[m]	0.42	0.90	1.37
	Max Shear	[kN]	33.95	14.29	3.83
	x	[m]	0.00	0.47	0.98
	Min Torsion	[kN]	-1.84	--	--
	x	[m]	0.05	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

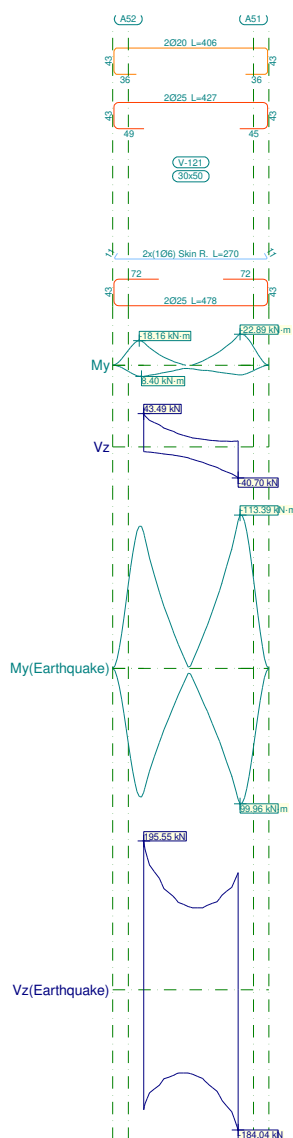


Beam reinforcement report

Frame 9				Span: V-120		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-72.71	-23.03	-37.24
		[m]		0.00	0.47	1.37
	Max Moment x	[kN·m]		70.44	28.15	33.60
		[m]		0.00	0.47	1.37
	Min Shear x	[kN]		-115.01	-76.44	-74.23
		[m]		0.00	0.47	1.37
	Max Shear x	[kN]		143.36	82.98	60.54
		[m]		0.00	0.47	0.98
	Min Torsion x	[kN]		-5.04	-2.60	--
		[m]		0.05	0.51	--
Max Torsion x	[kN]		2.88	1.58	--	
	[m]		0.05	0.51	--	
Top Reinf. Area		[cm²]	Real	10.06	9.55	6.85
			Req.	7.64	4.66	4.56
Bot. Reinf. Area		[cm²]	Real	10.06	9.25	6.03
			Req.	7.29	4.77	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.02 mm, L/89043 (L: 1.37 m)		



1.10.- Frame 10



Frame 10			Span: V-121		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-16.81	-3.93	-21.96
	x	[m]	0.00	0.99	1.52
	Max Moment	[kN·m]	8.32	3.86	7.11
	x	[m]	0.00	0.99	1.52
	Min Shear	[kN]	-10.89	-21.59	-40.70
	x	[m]	0.48	0.99	1.52
	Max Shear	[kN]	43.49	18.48	9.14
	x	[m]	0.00	0.52	1.02
	Min Torsion	[kN]	-1.89	--	--
	x	[m]	0.02	--	--
	Max Torsion	[kN]	--	--	1.56
	x	[m]	--	--	1.49

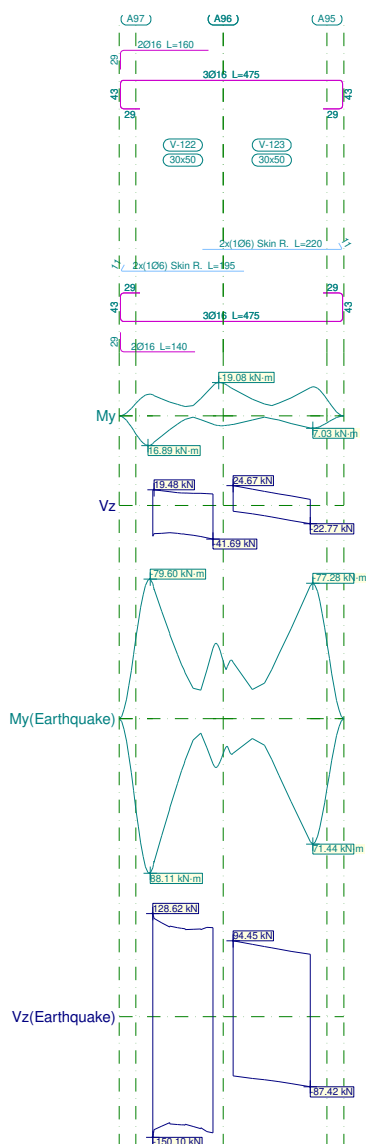


Beam reinforcement report

Frame 10				Span: V-121		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-100.38	-27.53	-109.31
		[m]		0.00	0.99	1.52
	Max Moment x	[kN·m]		91.43	27.88	96.62
		[m]		0.00	0.99	1.52
	Min Shear x	[kN]		-157.51	-119.61	-184.04
		[m]		0.00	0.99	1.52
	Max Shear x	[kN]		195.55	118.60	154.20
		[m]		0.00	0.52	1.52
	Min Torsion x	[kN]		-4.90	-1.87	-3.70
		[m]		0.00	0.52	1.42
Max Torsion x	[kN]		4.68	--	4.39	
	[m]		0.00	--	1.49	
Top Reinf. Area		[cm²]	Real	16.10	16.10	16.10
			Req.	9.44	5.66	9.96
Bot. Reinf. Area		[cm²]	Real	9.82	9.82	9.82
			Req.	8.61	8.05	8.93
Transv. Reinf. Area		[cm²/m]	Real	6.29	6.29	6.29
			Req.	5.50	2.45	4.91
Active Defl.				0.00 mm, <L/1000 (L: 1.52 m)		



1.11.- Frame 11



Frame 11			Span: V-122			Span: V-123		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment. x	[kN·m]	-12.12	-6.54	-17.29	-15.33	-7.29	-16.18
		[m]	0.00	0.37	0.90	0.00	0.69	1.15
	Max Moment x	[kN·m]	15.75	4.62	4.72	4.78	2.24	6.91
		[m]	0.00	0.37	0.90	0.00	0.69	1.15
	Min Shear x	[kN]	-38.32	-35.64	-41.69	-10.33	-15.86	-22.77
		[m]	0.00	0.49	0.90	0.29	0.69	1.15
	Max Shear x	[kN]	19.48	16.19	15.30	24.67	17.73	11.85
		[m]	0.02	0.37	0.60	0.00	0.47	0.86
	Min Torsion x	[kN]	-1.69	--	--	--	--	--
		[m]	0.00	--	--	--	--	--
	Max Torsion x	[kN]	--	--	--	--	--	--
		[m]	--	--	--	--	--	--

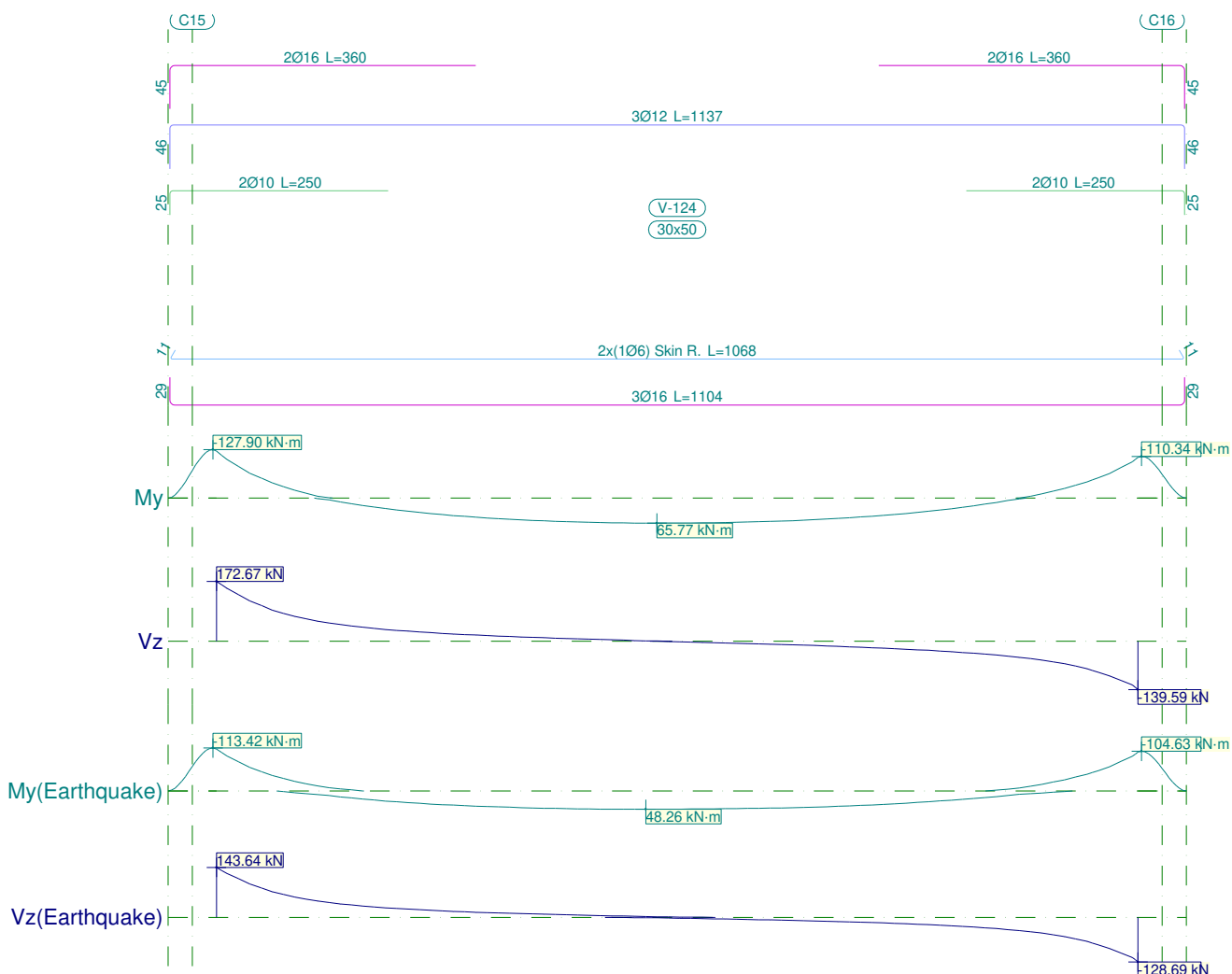


Beam reinforcement report

Frame 11				Span: V-122			Span: V-123		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-76.99	-36.77	-40.20	-32.23	-36.90	-75.71
		[m]		0.00	0.37	0.90	0.00	0.69	1.15
	Max Moment x	[kN·m]		84.90	37.04	25.70	19.57	32.27	70.06
		[m]		0.00	0.37	0.90	0.00	0.69	1.15
	Min Shear x	[kN]		-150.10	-134.90	-144.66	-76.70	-81.00	-87.42
		[m]		0.00	0.49	0.90	0.29	0.69	1.15
	Max Shear x	[kN]		128.62	110.95	111.44	94.45	87.51	81.63
		[m]		0.00	0.37	0.81	0.00	0.47	0.86
	Min Torsion x	[kN]		-7.11	-1.76	-1.76	--	--	--
		[m]		0.02	0.49	0.60	--	--	--
Max Torsion x	[kN]		5.97	1.87	1.91	--	--	--	
	[m]		0.02	0.49	0.72	--	--	--	
Top Reinf. Area		[cm²]	Real	10.06	8.48	7.25	6.03	6.03	6.03
			Req.	7.84	4.66	4.66	4.56	4.66	4.66
Bot. Reinf. Area		[cm²]	Real	10.06	7.85	6.24	6.03	6.03	6.03
			Req.	8.16	4.97	4.66	4.56	4.66	4.66
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	2.46	2.46	2.46
			Req.	2.71	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.02 mm, L/102714 (L: 1.80 m)			0.00 mm, <L/1000 (L: 1.15 m)		



1.12.- Frame 12



Frame 12			Span: V-124		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-124.40	--	-107.61
	x	[m]	0.00	--	9.50
	Max Moment	[kN·m]	57.30	65.77	53.34
	x	[m]	3.14	4.54	6.41
	Min Shear	[kN]	--	-13.41	-139.59
	x	[m]	--	6.29	9.50
	Max Shear	[kN]	172.67	11.29	--
	x	[m]	0.00	3.26	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

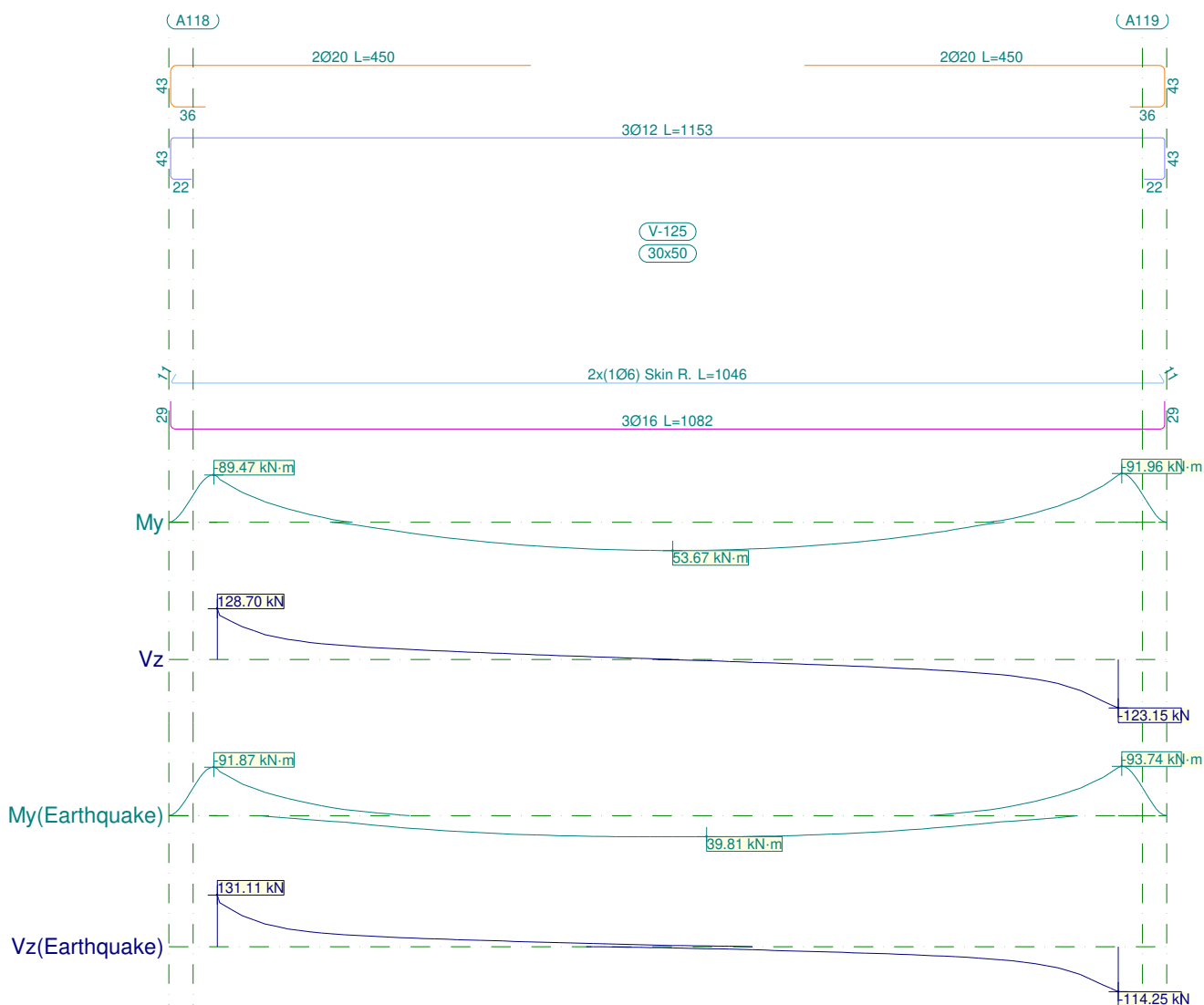


Beam reinforcement report

Frame 12				Span: V-124		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-110.61	--	-102.19
		[m]		0.00	--	9.50
	Max Moment x	[kN·m]		43.86	48.26	40.43
		[m]		3.14	4.43	6.41
	Min Shear x	[kN]		--	-11.06	-128.69
		[m]		--	6.29	9.50
	Max Shear x	[kN]		143.64	9.81	--
		[m]		0.00	3.26	--
	Min Torsion x	[kN]		-2.43	--	-1.78
		[m]		0.00	--	9.44
Max Torsion x	[kN]		1.97	--	2.25	
	[m]		0.00	--	9.44	
Top Reinf. Area		[cm²]	Real	8.99	3.39	8.99
			Req.	7.63	3.02	6.51
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.66	4.66	4.58
Transv. Reinf. Area		[cm²/m]	Real	6.29	2.46	4.04
			Req.	5.68	2.45	3.42
Active Defl.				5.31 mm, L/1789 (L: 9.50 m)		



1.13.- Frame 13



Frame 13			Span: V-125		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-86.77	--	-89.48
	x	[m]	0.00	--	9.28
	Max Moment	[kN·m]	42.03	53.67	43.54
	x	[m]	3.06	4.69	6.21
	Min Shear	[kN]	--	-12.39	-123.15
	x	[m]	--	6.09	9.28
	Max Shear	[kN]	128.70	13.10	--
	x	[m]	0.00	3.18	--
	Min Torsion	[kN]	-2.46	--	--
	x	[m]	0.00	--	--
	Max Torsion	[kN]	1.61	--	--
	x	[m]	0.00	--	--

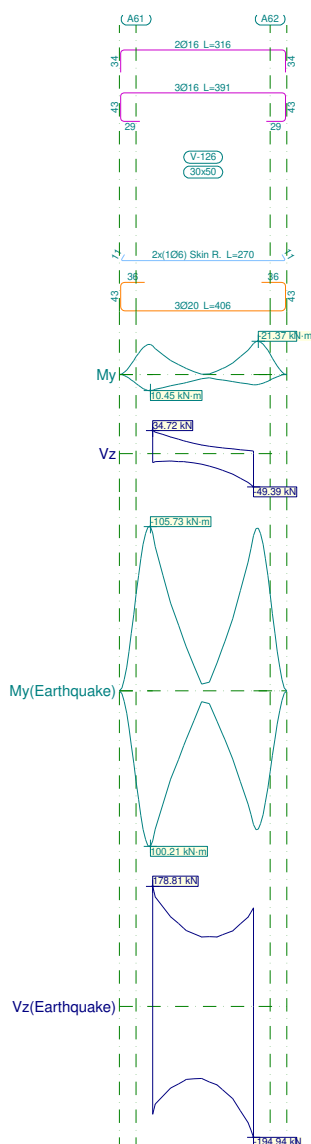


Beam reinforcement report

Frame 13				Span: V-125		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-89.20	--	-91.56
		[m]		0.00	--	9.28
	Max Moment x	[kN·m]		35.12	39.81	35.78
		[m]		3.06	5.04	6.21
	Min Shear x	[kN]		--	-12.04	-114.25
		[m]		--	6.09	9.28
	Max Shear x	[kN]		131.11	12.44	--
		[m]		0.00	3.18	--
	Min Torsion x	[kN]		-7.75	--	-2.30
		[m]		0.00	--	9.13
Max Torsion x	[kN]		6.90	--	2.11	
	[m]		0.00	--	9.13	
Top Reinf. Area		[cm²]	Real	9.68	3.77	9.68
			Req.	8.59	3.02	5.52
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.84	4.56	4.84
Transv. Reinf. Area		[cm²/m]	Real	3.33	2.46	2.70
			Req.	2.60	2.45	2.45
Active Defl.				3.57 mm, L/2604 (L: 9.28 m)		



1.14.- Frame 14



Frame 14			Span: V-126		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-18.44	-2.08	-19.88
	x	[m]	0.00	0.97	1.52
	Max Moment	[kN·m]	10.19	3.95	6.67
	x	[m]	0.00	0.62	1.52
	Min Shear	[kN]	-13.26	-21.56	-49.39
	x	[m]	0.00	0.97	1.52
	Max Shear	[kN]	34.72	15.62	8.90
	x	[m]	0.00	0.62	1.05
	Min Torsion	[kN]	-1.40	--	-1.66
	x	[m]	0.00	--	1.44
	Max Torsion	[kN]	2.10	--	--
	x	[m]	0.00	--	--

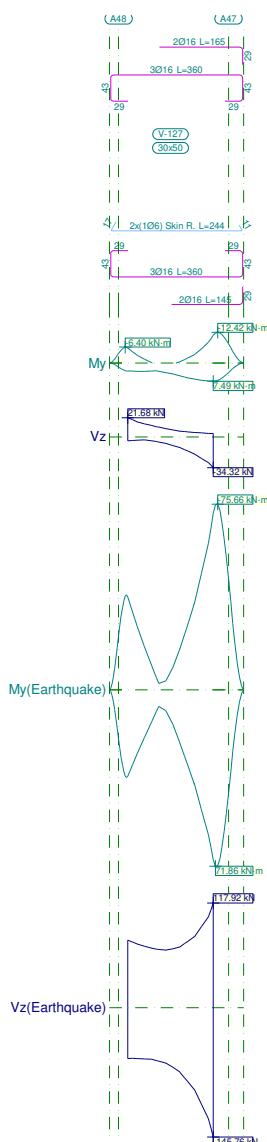


Beam reinforcement report

Frame 14				Span: V-126		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-101.70	-18.06	-100.15
		[m]		0.00	0.97	1.52
	Max Moment x	[kN·m]		96.67	19.45	86.09
		[m]		0.00	0.97	1.52
	Min Shear x	[kN]		-160.55	-116.73	-194.94
		[m]		0.00	0.97	1.52
	Max Shear x	[kN]		178.81	107.99	146.71
		[m]		0.00	0.62	1.52
	Min Torsion x	[kN]		-4.83	--	-3.63
		[m]		0.00	--	1.44
Max Torsion x	[kN]		5.53	--	2.58	
	[m]		0.00	--	1.44	
Top Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	9.43	4.86	9.37
Bot. Reinf. Area		[cm²]	Real	9.43	9.43	9.43
			Req.	8.90	5.03	8.26
Transv. Reinf. Area		[cm²/m]	Real	6.29	6.29	6.29
			Req.	4.53	2.45	5.43
Active Defl.				0.10 mm, L/29642 (L: 3.04 m)		



1.15.- Frame 15



Frame 15			Span: V-127		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-6.13	-1.40	-11.24
	x	[m]	0.00	0.94	1.40
	Max Moment	[kN·m]	3.44	5.80	7.49
	x	[m]	0.28	0.94	1.40
	Min Shear	[kN]	-4.12	-14.15	-34.32
	x	[m]	0.39	0.94	1.40
	Max Shear	[kN]	21.68	11.88	5.93
	x	[m]	0.00	0.47	0.98
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

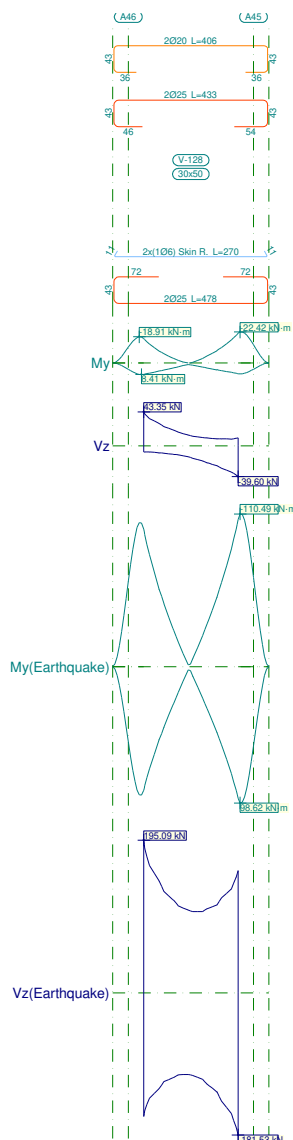


Beam reinforcement report

Frame 15				Span: V-127		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-37.91	-22.90	-72.00
	x	[m]		0.00	0.94	1.40
	Max Moment	[kN·m]		35.20	27.23	69.24
	x	[m]		0.00	0.94	1.40
	Min Shear	[kN]		-58.13	-79.14	-145.76
	x	[m]		0.39	0.94	1.40
	Max Shear	[kN]		75.89	72.27	117.92
	x	[m]		0.00	0.94	1.40
	Min Torsion	[kN]		--	--	-4.05
	x	[m]		--	--	1.33
Top Reinf. Area		[cm²]	Real	6.03	8.22	10.06
			Req.	4.56	4.66	7.61
Bot. Reinf. Area		[cm²]	Real	6.03	7.52	10.06
			Req.	4.56	4.66	7.22
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.01 mm, L/99861 (L: 1.40 m)		



1.16.- Frame 16



Frame 16			Span: V-128		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-17.61	-4.19	-21.51
	x	[m]	0.00	0.99	1.52
	Max Moment	[kN·m]	8.29	3.25	7.73
	x	[m]	0.00	0.99	1.52
	Min Shear	[kN]	-11.02	-20.48	-39.60
	x	[m]	0.48	0.99	1.52
	Max Shear	[kN]	43.35	18.54	10.02
	x	[m]	0.00	0.52	1.52
	Min Torsion	[kN]	-1.40	--	-1.69
	x	[m]	0.00	--	1.49
	Max Torsion	[kN]	1.48	--	--
	x	[m]	0.00	--	--



Beam reinforcement report

Frame 16				Span: V-128		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-99.43	-26.71	-106.45
		[m]		0.00	0.99	1.52
	Max Moment x	[kN·m]		89.42	26.61	95.20
		[m]		0.00	0.99	1.52
	Min Shear x	[kN]		-158.17	-113.63	-181.53
		[m]		0.00	0.99	1.52
	Max Shear x	[kN]		195.09	114.70	156.13
		[m]		0.00	0.52	1.52
	Min Torsion x	[kN]		-5.37	--	-5.42
		[m]		0.00	--	1.49
Max Torsion x	[kN]		5.45	1.66	4.80	
	[m]		0.00	0.56	1.49	
Top Reinf. Area		[cm²]	Real	16.10	16.10	16.10
			Req.	9.38	5.47	9.78
Bot. Reinf. Area		[cm²]	Real	9.82	9.82	9.82
			Req.	8.49	8.05	8.84
Transv. Reinf. Area		[cm²/m]	Real	6.29	6.29	6.29
			Req.	5.47	2.45	4.75
Active Defl.				0.04 mm, L/71394 (L: 3.04 m)		



Date: 11/20/20

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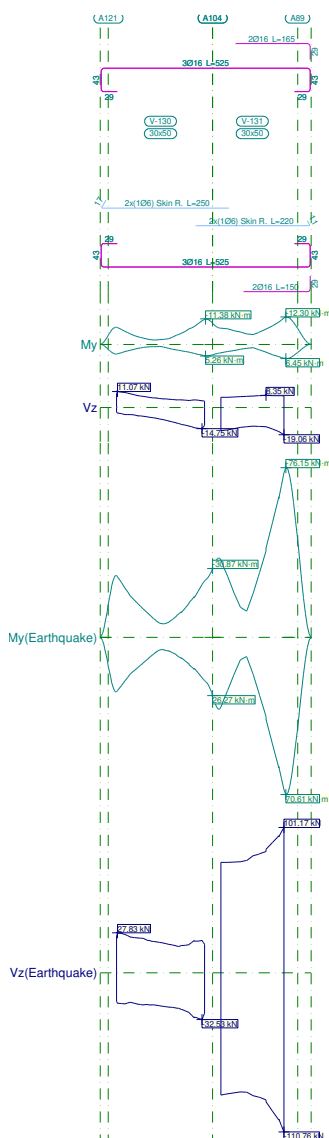


Beam reinforcement report

Frame 17				Span: V-129		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-70.76	-23.54	-35.16
	x	[m]		0.00	0.47	1.36
	Max Moment	[kN·m]		68.34	28.00	32.61
	x	[m]		0.00	0.47	1.36
	Min Shear	[kN]		-109.41	-74.29	-77.94
	x	[m]		0.00	0.47	1.36
	Max Shear	[kN]		136.08	80.66	61.47
	x	[m]		0.00	0.47	0.98
	Min Torsion	[kN]		-3.65	-1.84	-2.85
	x	[m]		0.04	0.51	1.21
Top Reinf. Area		[cm²]	Real	10.06	9.55	6.85
			Req.	7.50	4.66	5.27
Bot. Reinf. Area		[cm²]	Real	10.06	9.25	6.03
			Req.	7.17	4.77	5.07
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.01 mm, L/104584 (L: 1.36 m)		



1.18.- Frame 18



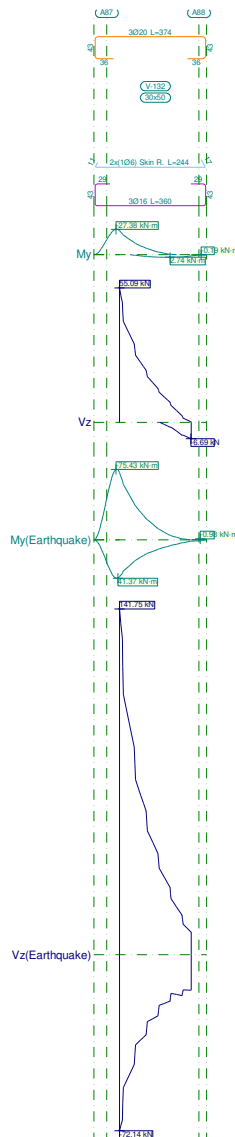
Frame 18			Span: V-130			Span: V-131		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-7.66	-3.28	-11.22	-7.30	-5.51	-11.91
	x	[m]	0.00	1.02	1.60	0.00	0.71	1.15
	Max Moment	[kN·m]	4.42	2.16	5.20	3.75	2.54	6.30
	x	[m]	0.00	1.02	1.60	0.00	0.71	1.15
	Min Shear	[kN]	-6.05	-10.04	-14.75	-16.31	-13.50	-19.06
	x	[m]	0.48	1.02	1.56	0.00	0.47	1.15
	Max Shear	[kN]	11.07	7.36	5.27	7.45	8.14	8.35
	x	[m]	0.02	0.55	1.42	0.36	0.71	0.82
	Min Torsion	[kN]	--	--	--	--	--	-5.19
	x	[m]	--	--	--	--	--	1.06
	Max Torsion	[kN]	--	--	--	3.22	--	--
	x	[m]	--	--	--	0.00	--	--



Beam reinforcement report

Frame 18				Span: V-130			Span: V-131		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-27.67	-11.11	-25.31	-34.75	-29.11	-73.83
		[m]		0.00	0.55	1.60	0.00	0.71	1.15
	Max Moment x	[kN·m]		24.42	10.06	19.49	31.32	26.14	68.49
		[m]		0.00	0.55	1.60	0.00	0.71	1.15
	Min Shear x	[kN]		-22.30	-24.14	-32.53	-85.07	-86.63	-110.76
		[m]		0.48	1.02	1.56	0.00	0.71	1.15
	Max Shear x	[kN]		27.83	22.79	22.56	77.34	82.77	101.17
		[m]		0.02	0.55	1.42	0.36	0.71	1.15
	Min Torsion x	[kN]		-1.68	--	--	--	--	-7.12
		[m]		0.00	--	--	--	--	1.06
	Max Torsion x	[kN]		2.05	--	--	3.12	--	--
		[m]		0.00	--	--	0.00	--	--
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.50	8.35	10.06
			Req.	4.56	4.56	4.56	5.25	4.66	7.64
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	8.03	10.06
			Req.	4.56	4.56	4.56	5.05	4.66	7.18
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46	3.33	3.33	3.33
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.16 mm, L/20468 (L: 3.21 m)			0.00 mm, <L/1000 (L: 1.15 m)		

1.19.- Frame 19



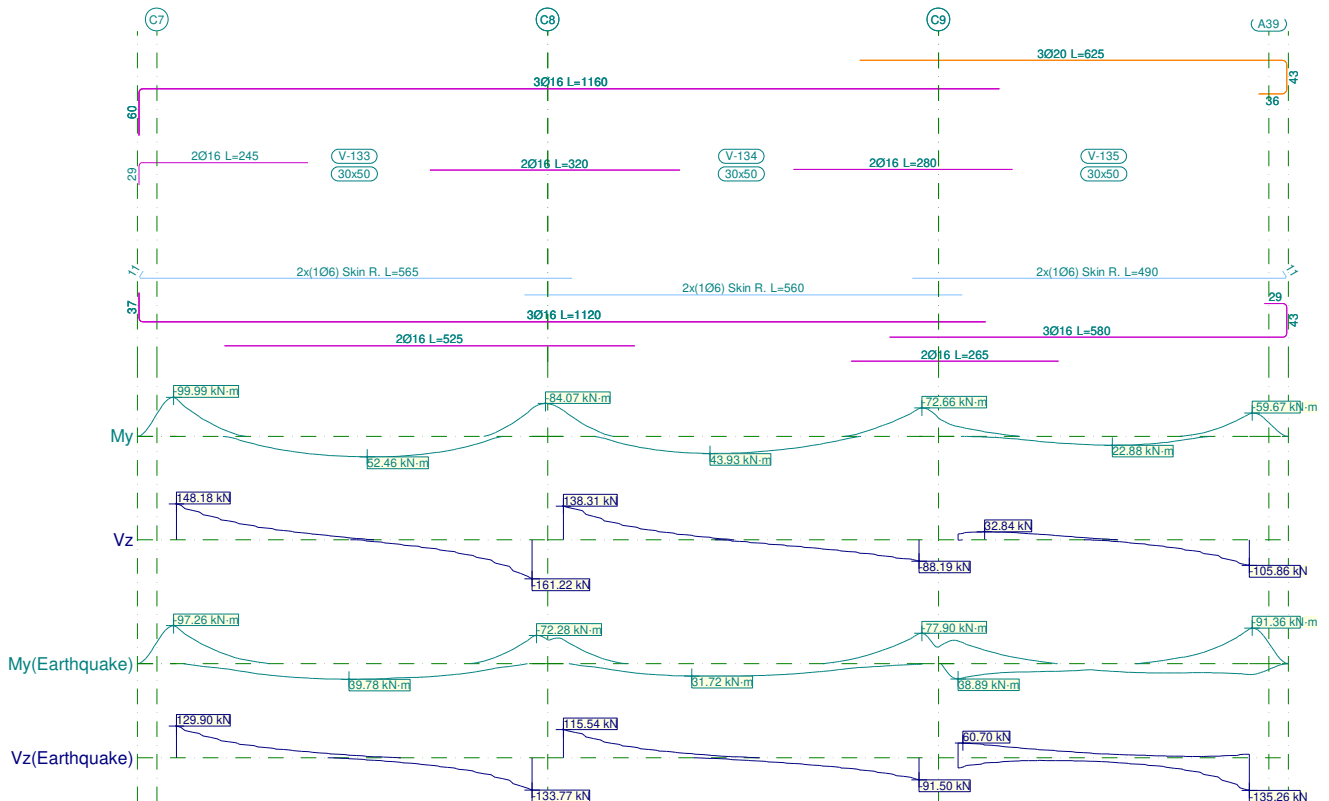
Frame 19			Span: V-132		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment. x	[kN·m]	-25.96	-8.29	--
		[m]	0.00	0.47	--
	Max Moment x	[kN·m]	1.44	2.74	2.74
		[m]	0.47	0.94	0.99
	Min Shear x	[kN]	--	-1.41	-6.69
		[m]	--	0.94	1.40
	Max Shear x	[kN]	55.09	22.88	9.25
		[m]	0.00	0.47	0.94
	Min Torsion x	[kN]	--	--	--
		[m]	--	--	--
	Max Torsion x	[kN]	5.20	3.10	2.36
		[m]	0.05	0.52	0.99



Beam reinforcement report

Frame 19				Span: V-132		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-71.97	-25.85	-6.23
		[m]		0.00	0.47	0.94
	Max Moment x	[kN·m]		39.73	16.87	7.21
		[m]		0.00	0.47	0.94
	Min Shear x	[kN]		-72.14	-33.81	-19.40
		[m]		0.00	0.47	0.94
	Max Shear x	[kN]		141.75	62.09	29.40
		[m]		0.00	0.47	0.94
	Min Torsion x	[kN]		-5.26	-1.79	-1.41
		[m]		0.00	0.52	1.24
Max Torsion x	[kN]		9.92	5.22	3.29	
	[m]		0.05	0.52	0.99	
Top Reinf. Area		[cm²]	Real	9.43	9.43	9.43
			Req.	7.61	6.91	4.54
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.48	5.26	4.71
Transv. Reinf. Area		[cm²/m]	Real	3.77	3.77	3.77
			Req.	3.38	2.45	2.45
Active Defl.				0.14 mm, L/20060 (L: 2.81 m)		

1.20.- Frame 20



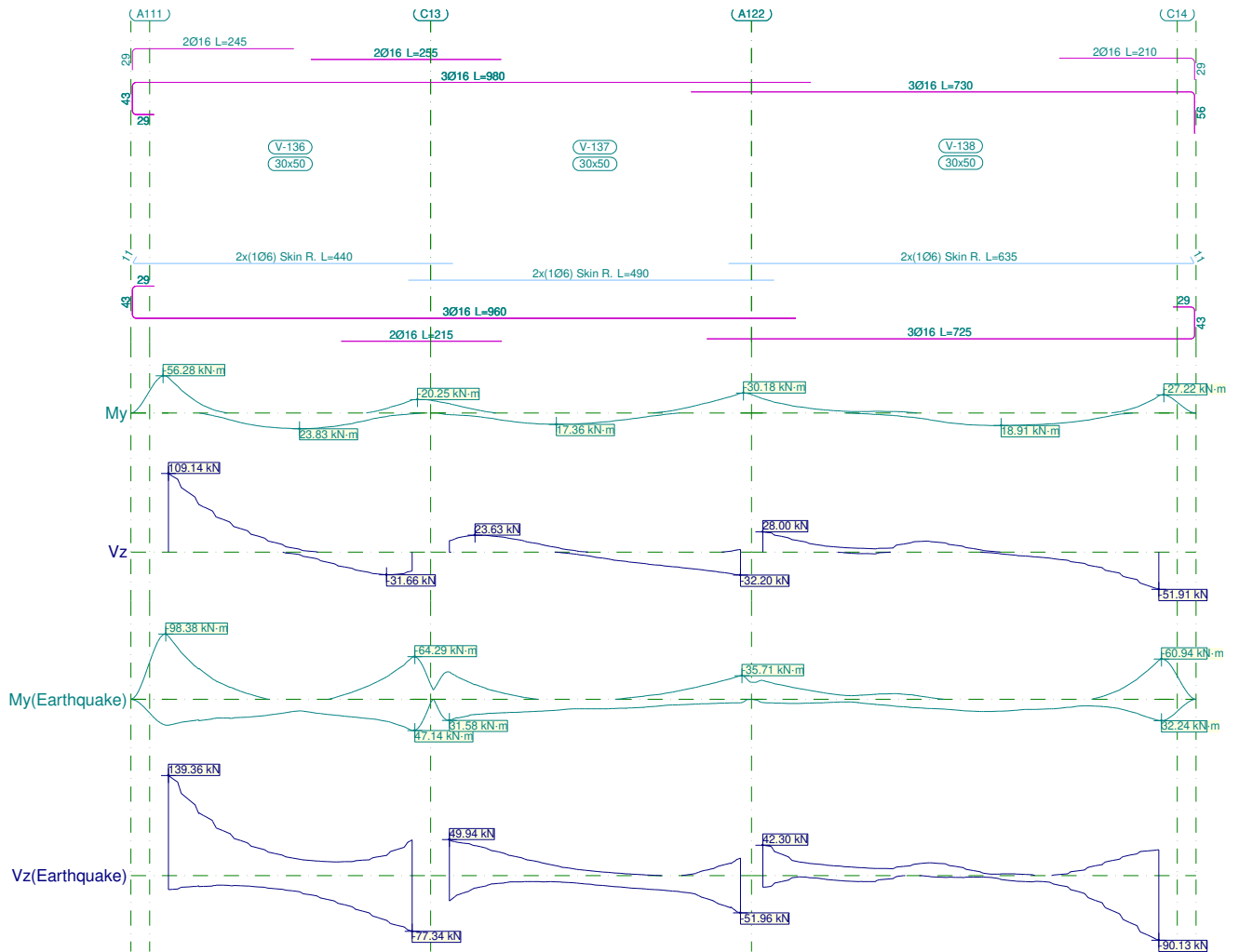


Beam reinforcement report

Frame 20				Span: V-133			Span: V-134			Span: V-135		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-96.84	--	-71.28	-66.09	--	-70.80	-24.93	--	-57.27
		x	[m]	0.00	--	4.55	0.00	--	4.55	0.00	--	3.72
	Max Moment	[kN·m]		39.61	52.46	47.06	40.22	43.93	27.77	15.95	22.88	17.85
		x	[m]	1.51	2.44	3.09	1.46	1.88	3.04	1.23	1.97	2.53
	Min Shear	[kN]		--	-24.75	-161.22	--	-26.65	-88.19	-2.10	-21.64	-105.86
		x	[m]	--	3.00	4.55	--	2.95	4.55	0.00	2.44	3.72
	Max Shear	[kN]		148.18	29.10	--	138.31	20.33	--	32.84	17.46	--
		x	[m]	0.00	1.60	--	0.00	1.55	--	0.34	1.25	--
	Min Torsion	[kN]		-5.73	-8.36	-20.92	-11.44	-8.25	-6.96	-4.60	-6.92	-15.82
		x	[m]	1.46	2.86	4.49	0.48	1.64	3.74	1.23	2.39	3.56
	Max Torsion	[kN]		7.32	2.73	2.67	8.06	2.39	--	4.45	2.08	1.66
		x	[m]	0.00	1.60	3.84	0.06	1.55	--	0.00	1.27	2.53
Seismic situations	Min Moment.	[kN·m]		-94.64	--	-68.13	-61.97	--	-76.78	-58.57	-3.57	-88.53
		x	[m]	0.00	--	4.55	0.00	--	4.55	0.00	2.44	3.72
	Max Moment	[kN·m]		34.94	39.78	34.68	30.81	31.72	24.66	38.89	23.38	27.45
		x	[m]	1.51	2.21	3.09	1.46	1.64	3.04	0.00	2.44	3.72
	Min Shear	[kN]		--	-23.23	-133.77	--	-24.27	-91.50	-43.22	-31.77	-135.26
		x	[m]	--	3.00	4.55	--	2.95	4.55	0.00	2.44	3.72
	Max Shear	[kN]		129.90	26.25	--	115.54	18.67	--	60.70	28.42	14.85
		x	[m]	0.00	1.60	--	0.00	1.55	--	0.06	1.25	3.72
	Min Torsion	[kN]		-4.55	-6.04	-18.42	-8.81	-5.91	-5.74	-3.79	-5.53	-13.71
		x	[m]	0.76	2.86	4.49	0.24	1.64	4.00	1.23	2.39	3.56
	Max Torsion	[kN]		7.24	2.04	2.35	6.96	1.73	--	4.66	1.73	1.38
		x	[m]	0.00	1.60	4.31	0.06	1.55	--	0.00	1.27	2.53
Top Reinf. Area		[cm ²]	Real	10.06	6.47	10.06	10.06	6.06	17.58	17.27	9.43	9.43
			Req.	9.11	5.03	8.14	8.09	4.87	7.82	6.85	4.87	8.58
Bot. Reinf. Area		[cm ²]	Real	10.06	10.06	10.06	10.06	6.03	14.01	13.70	6.27	6.03
			Req.	6.06	6.25	6.23	5.73	5.73	8.79	8.64	4.71	4.77
Transv. Reinf. Area		[cm ² /m]	Real	12.58	12.58	12.58	5.66	5.66	5.66	7.08	7.08	7.08
			Req.	6.32	2.74	11.37	5.12	2.67	2.45	2.45	2.45	6.61
Active Defl.				0.87 mm, L/5230 (L: 4.55 m)			0.60 mm, L/7436 (L: 4.44 m)			0.17 mm, L/21964 (L: 3.72 m)		



1.21.- Frame 21



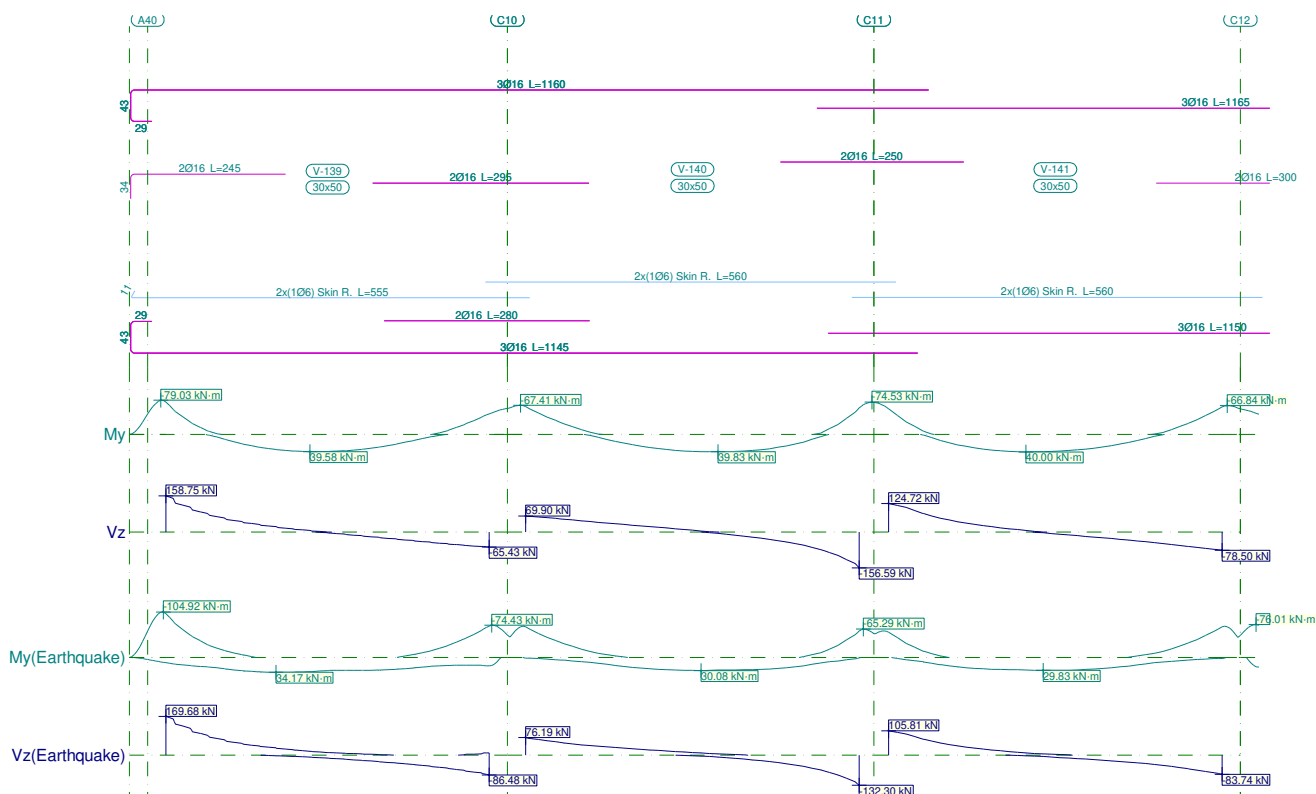


Beam reinforcement report

Frame 21				Span: V-136			Span: V-137			Span: V-138		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-53.5	--	-19.5	-14.2	--	-29.4	-21.6	-2.2	-25.9
		x	[m]	0.00	--	3.27	0.00	--	3.90	0.00	1.77	5.30
	Max Moment	[kN·m]	17.22	23.8	20.3	16.8	17.3	6.49	3.75	18.9	17.7	
		x	[m]	1.08	1.76	2.22	1.28	1.43	2.60	1.74	3.19	3.61
	Min Shear	[kN]	--	-14.1	-31.6	-0.43	-15.1	-32.2	-2.52	-5.7	-51.9	
		x	[m]	--	2.13	2.92	0.00	2.52	3.90	1.51	3.52	5.30
	Max Shear	[kN]	109.1	24.6	--	23.6	7.86	3.47	28.0	15.2	--	
		x	[m]	0.00	1.11	--	0.34	1.35	3.90	0.00	2.21	--
	Min Torsion	[kN]	-2.18	-2.56	-4.12	-2.91	-2.03	-2.34	--	-3.8	-10.1	
		x	[m]	0.87	2.04	3.21	0.00	1.35	3.84	--	3.38	5.24
	Max Torsion	[kN]	14.52	7.27	5.06	2.84	2.48	1.51	2.46	1.76	--	
		x	[m]	0.12	1.11	2.22	0.73	1.43	2.60	0.00	2.49	--
Seismic situations	Min Moment.	[kN·m]	-95.4	-7.24	-63.3	-41.4	-3.81	-35.5	-28.4	-8.6	-59.0	
		x	[m]	0.00	1.11	3.27	0.00	2.52	3.90	0.00	1.79	5.30
	Max Moment	[kN·m]	38.86	26.3	46.9	31.5	16.8	11.8	9.83	18.3	31.5	
		x	[m]	0.00	1.11	3.27	0.00	1.35	2.60	1.74	2.91	5.30
	Min Shear	[kN]	-19.4	-33.2	-77.3	-35.4	-17.7	-51.9	-16.3	-8.3	-90.1	
		x	[m]	0.00	2.13	3.27	0.00	2.52	3.90	0.00	3.52	5.30
	Max Shear	[kN]	139.3	40.8	49.6	49.9	15.1	24.3	42.3	17.9	35.8	
		x	[m]	0.00	1.11	3.27	0.00	1.35	3.90	0.00	2.21	5.30
	Min Torsion	[kN]	-1.80	-2.10	-4.18	-2.64	-1.63	-5.30	-2.58	-3.8	-10.1	
		x	[m]	0.87	2.04	3.21	0.00	1.35	3.84	0.00	3.38	5.24
	Max Torsion	[kN]	12.59	6.01	4.27	2.90	2.24	4.39	4.64	1.89	1.65	
		x	[m]	0.12	1.11	2.46	0.50	1.43	3.84	0.00	2.96	3.61
Top Reinf. Area		[cm²]	Real	10.06	9.08	10.0	9.71	6.03	11.2	11.1	6.03	10.0
			Req.	8.98	4.79	6.93	5.43	4.56	5.36	5.32	4.56	6.73
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	10.0	10.0	6.03	10.7	10.6	6.03	6.03
			Req.	5.43	4.83	5.92	4.93	4.56	5.64	5.56	4.56	5.03
Transv. Reinf. Area		[cm²/m]	Real	7.08	7.08	7.08	3.33	3.33	3.33	3.33	3.33	3.54
			Req.	6.51	2.45	2.45	2.45	2.45	2.45	2.45	2.45	3.30
Active Defl.				0.17 mm, L/18350 (L: 3.14 m)			0.16 mm, L/21546 (L: 3.38 m)			0.28 mm, L/18342 (L: 5.05 m)		



1.22.- Frame 22



Frame 22			Span: V-139			Span: V-140			Span: V-141		
Section			30x50			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-74.98	--	-47.68	-64.85	--	-61.34	-59.29	--	-63.80
		[m]	0.00	--	4.41	0.00	--	4.55	0.00	--	4.55
	Max Moment	[kN·m]	32.32	39.58	25.36	23.67	39.83	36.90	35.86	40.00	25.35
		[m]	1.40	1.97	3.03	1.46	2.63	3.09	1.41	1.88	3.04
	Min Shear	[kN]	--	-24.37	-65.43	--	-17.25	-156.59	--	-24.61	-78.50
		[m]	--	2.93	4.41	--	2.98	4.55	--	2.93	4.55
	Max Shear	[kN]	158.75	23.99	--	69.90	27.30	--	124.72	19.44	--
		[m]	0.00	1.50	--	0.00	1.58	--	0.00	1.53	--
	Min Torsion	[kN]	-9.03	-6.80	-6.39	--	--	-14.08	--	--	-3.13
		[m]	0.33	1.50	3.60	--	--	4.49	--	--	4.44
	Max Torsion	[kN]	15.66	--	--	5.21	--	--	5.42	--	--
		[m]	0.00	--	--	0.00	--	--	0.00	--	--

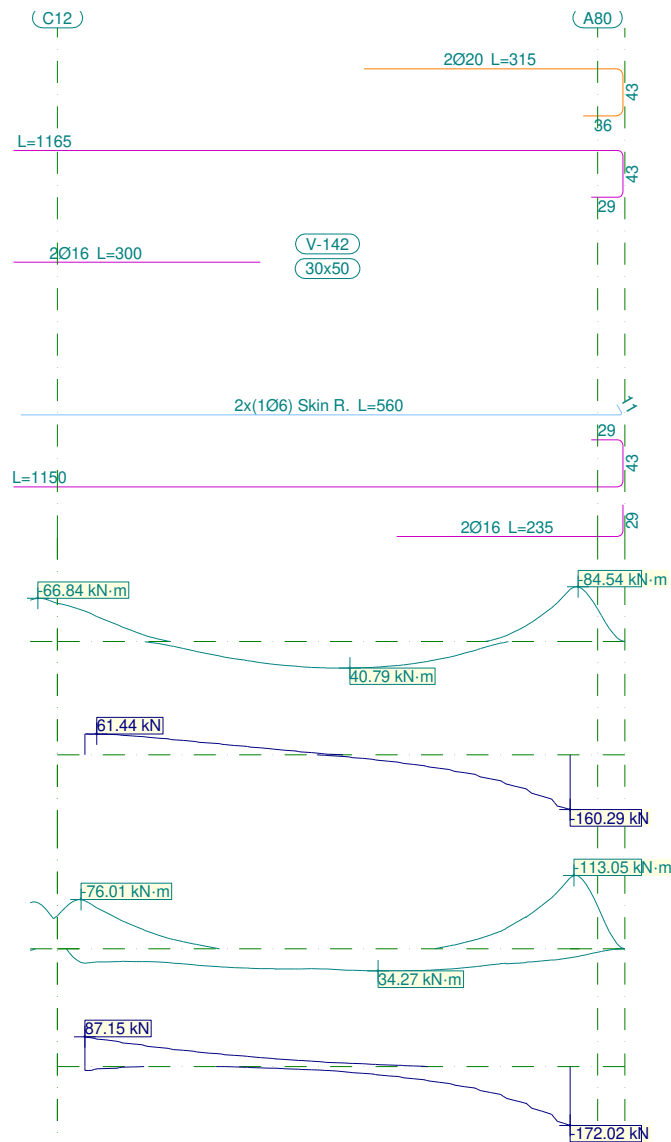


Beam reinforcement report

Frame 22				Span: V-139			Span: V-140			Span: V-141		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-101.18	--	-72.59	-70.89	--	-61.16	-58.28	--	-70.99
		x		[m]	0.00	--	4.41	0.00	--	4.55	0.00	--
	Max Moment	[kN·m]		33.81	34.17	28.09	22.77	30.08	27.89	27.19	29.83	23.73
		x		[m]	1.40	1.50	3.03	1.46	2.39	3.09	1.41	2.11
	Min Shear	[kN]		-1.52	-29.94	-86.48	--	-17.50	-132.30	--	-22.69	-83.74
		x		[m]	1.40	2.93	4.41	--	2.98	4.55	--	2.93
	Max Shear	[kN]		169.68	31.32	9.35	76.19	24.98	--	105.81	18.88	--
		x		[m]	0.00	1.50	4.41	0.00	1.58	--	0.00	1.53
	Min Torsion	[kN]		-8.19	-5.34	-5.65	--	--	-13.03	--	--	-3.06
		x		[m]	0.33	1.50	4.30	--	--	4.49	--	--
	Max Torsion	[kN]		13.25	--	--	5.16	--	--	5.04	--	--
		x		[m]	0.00	--	--	0.00	--	--	0.00	--
Top Reinf. Area		[cm²]	Real	10.06	6.74	10.06	10.06	6.03	14.64	14.40	6.03	10.06
			Req.	9.38	4.56	7.53	7.39	4.56	7.65	7.59	4.56	7.41
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	10.06	10.06	6.03	10.47	10.16	6.03	6.03
			Req.	5.39	5.47	5.16	5.03	4.56	7.32	7.20	4.56	5.03
Transv. Reinf. Area		[cm²/m]	Real	11.32	11.32	11.32	3.33	3.33	9.81	4.35	3.33	3.33
			Req.	9.43	2.45	2.45	2.45	2.45	8.46	3.54	2.45	2.45
Active Defl.				0.57 mm, L/7674 (L: 4.41 m)			0.50 mm, L/8509 (L: 4.26 m)			0.53 mm, L/8258 (L: 4.37 m)		



Beam reinforcement report



Frame 22			Span: V-142		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-46.93	--	-80.60
	x	[m]	0.00	--	4.43
	Max Moment	[kN·m]	28.62	40.79	33.64
	x	[m]	1.46	2.42	3.00
	Min Shear	[kN]	--	-25.04	-160.29
	x	[m]	--	2.91	4.43
	Max Shear	[kN]	61.44	24.12	--
	x	[m]	0.11	1.48	--
	Min Torsion	[kN]	--	-2.04	-14.81
	x	[m]	--	2.91	4.31
	Max Torsion	[kN]	5.79	6.04	7.85
	x	[m]	0.76	2.86	4.02



Beam reinforcement report

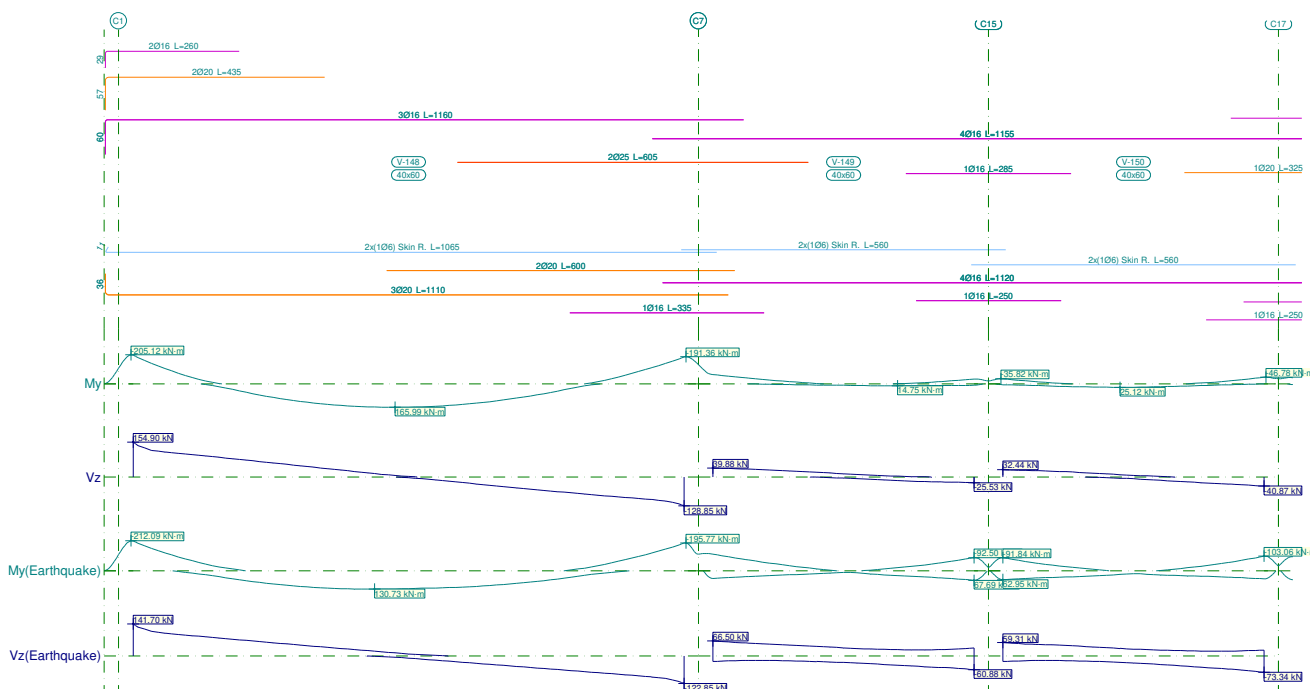
Frame 23				Span: V-143			Span: V-144			Span: V-145		
Section				30x60			30x60			30x60		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-182.90	--	-166.55	-145.06	--	-142.09	-145.35	--	-144.77
		[m]		0.00	--	9.50	0.00	--	9.50	0.00	--	9.50
	Max Moment	[kN·m]		113.32	140.60	95.81	80.73	116.03	84.58	83.74	118.33	85.56
		[m]		3.09	4.49	6.36	3.09	4.73	6.36	3.09	4.73	6.36
	Min Shear	[kN]		--	-41.20	-81.36	--	-33.33	-71.33	--	-34.10	-71.98
		[m]		--	6.24	8.69	--	6.24	8.69	--	6.24	8.69
	Max Shear	[kN]		127.79	34.01	--	71.52	35.41	--	72.03	34.95	--
		[m]		0.00	3.21	--	0.99	3.21	--	0.99	3.21	--
	Min Torsion	[kN]		-26.35	--	--	-14.04	--	--	-15.24	--	--
		[m]		0.00	--	--	0.00	--	--	0.00	--	--
	Max Torsion	[kN]		--	--	14.14	--	--	12.55	--	--	13.08
		[m]		--	--	9.39	--	--	9.39	--	--	9.39
Seismic situations	Min Moment.	[kN·m]		-170.66	--	-154.73	-141.87	--	-138.76	-143.34	--	-141.04
		[m]		0.00	--	9.50	0.00	--	9.50	0.00	--	9.50
	Max Moment	[kN·m]		92.67	107.81	79.17	68.83	89.17	71.45	70.84	90.52	72.17
		[m]		3.09	4.26	6.36	3.09	4.84	6.36	3.09	4.96	6.36
	Min Shear	[kN]		--	-35.94	-70.36	--	-30.80	-62.96	--	-31.23	-63.94
		[m]		--	6.24	8.69	--	6.24	8.69	--	6.24	8.69
	Max Shear	[kN]		114.56	31.95	--	65.02	32.31	--	64.93	32.12	--
		[m]		0.00	3.21	--	0.76	3.21	--	0.76	3.21	--
	Min Torsion	[kN]		-21.29	--	--	-11.57	--	--	-12.35	--	--
		[m]		0.00	--	--	0.00	--	--	0.00	--	--
	Max Torsion	[kN]		--	--	11.91	--	--	10.67	--	--	10.90
		[m]		--	--	9.39	--	--	9.39	--	--	9.39
Top Reinf. Area		[cm²]	Real	13.98	6.03	17.50	17.36	6.03	16.63	16.34	6.03	16.63
			Req.	13.13	4.81	12.35	12.04	4.81	11.31	11.32	4.59	11.40
Bot. Reinf. Area		[cm²]	Real	9.43	9.43	14.49	13.41	6.03	11.10	11.10	6.03	11.10
			Req.	6.99	6.83	8.75	8.68	5.66	8.31	8.17	5.70	8.31
Transv. Reinf. Area		[cm²/m]	Real	9.15	2.83	4.04	4.04	2.83	3.54	4.35	2.83	3.77
			Req.	8.42	2.45	3.75	3.73	2.45	3.33	4.05	2.45	3.47
Active Defl.				8.14 mm, L/1167 (L: 9.50 m)			4.68 mm, L/2031 (L: 9.50 m)			5.06 mm, L/1876 (L: 9.50 m)		



Beam reinforcement report

Frame 23			Span: V-146			Span: V-147		
Section			30x60			30x60		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Transv. Reinf. Area	[cm²/m]	Real	3.77	2.83	4.35	2.83	2.83	11.18
		Req.	3.40	2.45	3.95	2.53	2.45	9.92
Active Defl.			4.91 mm, L/1936 (L: 9.50 m)			5.93 mm, L/1603 (L: 9.50 m)		

1.24.- Frame 24



Frame 24				Span: V-148			Span: V-149			Span: V-150		
Section				40x60			40x60			40x60		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-203.31	--	-189.54	-65.85	-8.79	-33.41	-35.46	--	-46.10
		[m]		0.00	--	9.50	0.00	1.55	4.50	0.00	--	4.50
	Max Moment	[kN·m]		135.78	165.99	114.55	6.18	14.40	14.75	21.74	25.12	17.00
		[m]		3.12	4.52	6.38	1.43	2.95	3.18	1.43	2.02	3.07
	Min Shear	[kN]		--	-39.71	-128.85	--	-13.18	-25.53	-0.14	-18.67	-40.87
		[m]		--	6.27	9.50	--	2.95	4.50	1.43	2.95	4.50
	Max Shear	[kN]		154.90	40.03	--	39.88	23.94	4.38	32.44	16.98	--
		[m]		0.00	3.23	--	0.00	1.55	3.07	0.00	1.55	--
	Min Torsion	[kN]		--	-4.73	-25.73	--	--	-12.09	--	-2.92	-10.57
		[m]		--	6.15	9.42	--	--	4.35	--	2.95	4.35
	Max Torsion	[kN]		44.72	--	--	6.85	2.62	--	13.64	1.67	--
		[m]		0.00	--	--	0.00	1.55	--	0.00	1.55	--

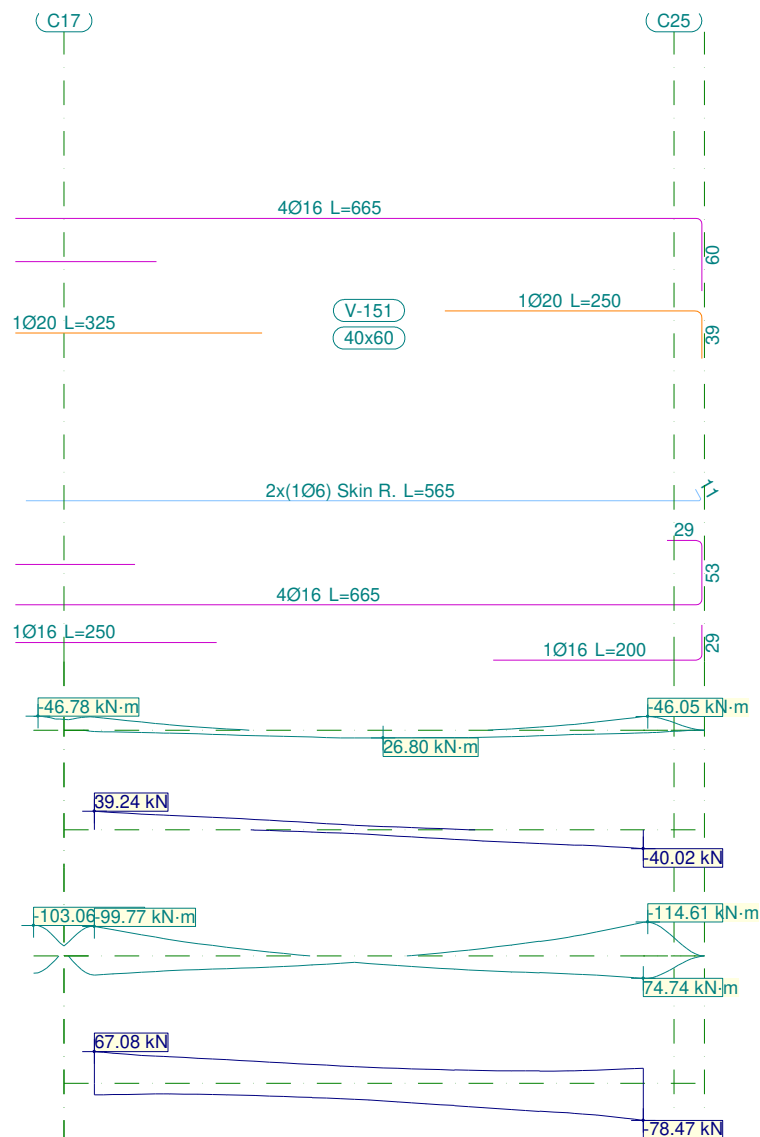


Beam reinforcement report

Frame 24				Span: V-148			Span: V-149			Span: V-150		
Section				40x60			40x60			40x60		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-210.80	--	-195.51	-117.40	-24.18	-92.50	-91.84	-11.51	-103.06
		[m]		0.00	--	9.50	0.00	1.55	4.50	0.00	2.95	4.50
	Max Moment	[kN·m]		117.30	130.73	97.63	55.10	28.95	67.69	62.95	37.00	57.65
		[m]		3.12	4.17	6.38	0.00	2.95	4.50	0.00	1.55	4.50
	Min Shear	[kN]		--	-39.89	-122.85	-24.79	-38.16	-60.88	-24.52	-42.21	-73.34
		[m]		--	6.27	9.50	0.00	2.95	4.50	0.00	2.95	4.50
	Max Shear	[kN]		141.70	40.54	--	66.50	45.59	34.83	59.31	39.92	25.23
		[m]		0.00	3.23	--	0.00	1.55	4.50	0.00	1.55	4.50
	Min Torsion	[kN]		--	-3.68	-21.57	--	--	-10.88	--	-2.96	-9.82
		[m]		--	6.15	9.42	--	--	4.35	--	2.95	4.35
	Max Torsion	[kN]		35.22	--	--	7.37	2.54	--	12.74	1.75	--
		[m]		0.00	--	--	0.15	1.55	--	0.15	1.55	--
Top Reinf. Area		[cm²]	Real	16.34	10.54	21.60	22.03	8.66	10.06	10.06	8.04	17.27
			Req.	15.41	7.86	14.63	11.55	7.38	9.44	9.41	7.38	10.01
Bot. Reinf. Area		[cm²]	Real	9.43	15.71	22.82	16.64	8.04	10.06	10.06	8.04	14.96
			Req.	8.81	8.04	10.80	11.01	7.38	8.24	8.02	7.38	8.63
Transv. Reinf. Area		[cm²/m]	Real	10.06	3.33	5.15	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	9.37	3.26	4.90	3.26	3.26	3.26	3.26	3.26	3.26
Active Defl.				6.46 mm, L/1470 (L: 9.50 m)			0.11 mm, L/42303 (L: 4.50 m)			0.15 mm, L/29739 (L: 4.50 m)		



Beam reinforcement report



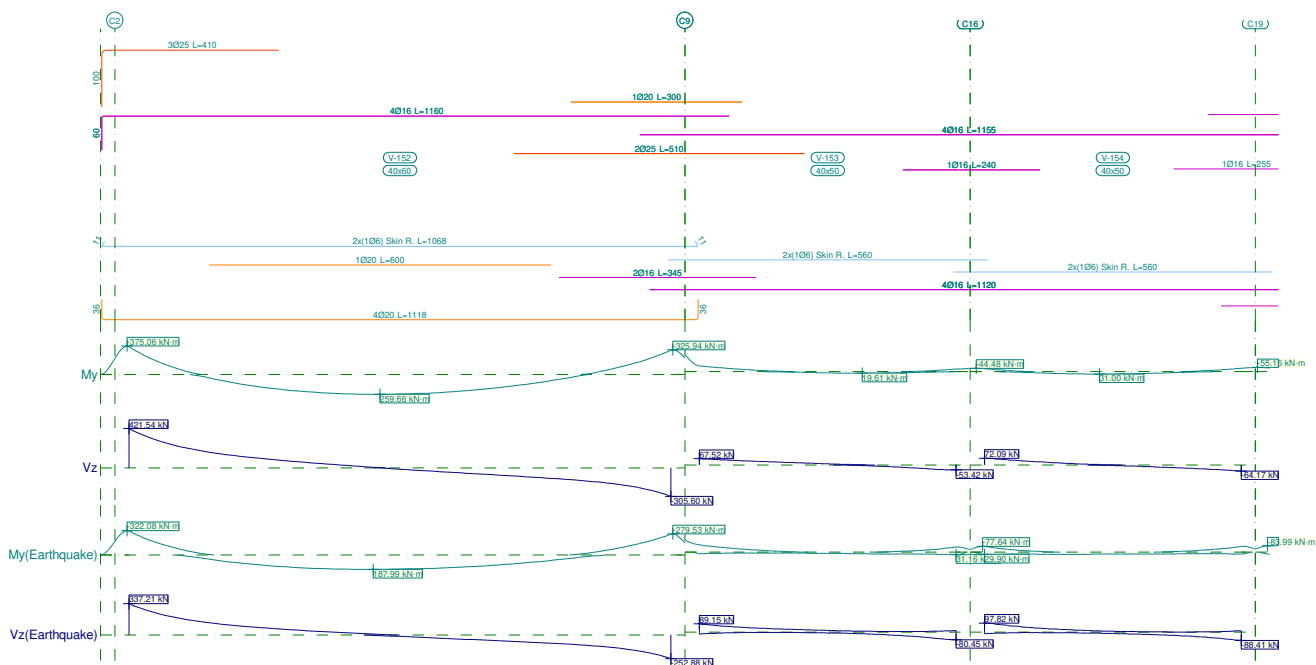
Frame 24			Span: V-151		
Section			40x60		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-43.48	--	-45.49
	x	[m]	0.00	--	4.50
	Max Moment	[kN·m]	19.59	26.80	24.71
	x	[m]	1.43	2.37	3.07
	Min Shear	[kN]	-1.30	-20.04	-40.02
	x	[m]	1.43	2.95	4.50
	Max Shear	[kN]	39.24	18.45	0.44
	x	[m]	0.00	1.55	3.07
	Min Torsion	[kN]	--	--	-16.57
	x	[m]	--	--	4.35
	Max Torsion	[kN]	10.15	3.11	--
	x	[m]	0.00	1.55	--



Beam reinforcement report

Frame 24				Span: V-151		
Section				40x60		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-99.77	-15.25	-113.85
		[m]		0.00	2.95	4.50
	Max Moment x	[kN·m]		63.60	44.10	74.74
		[m]		0.00	2.95	4.50
	Min Shear x	[kN]		-27.08	-47.30	-78.47
		[m]		1.43	2.95	4.50
	Max Shear x	[kN]		67.08	43.08	31.46
		[m]		0.00	1.55	4.50
	Min Torsion x	[kN]		--	-1.79	-14.93
		[m]		--	2.95	4.35
Max Torsion x	[kN]		10.41	2.99	--	
	[m]		0.00	1.55	--	
Top Reinf. Area		[cm²]	Real	16.55	8.30	11.19
			Req.	9.85	7.38	10.52
Bot. Reinf. Area		[cm²]	Real	14.66	8.04	10.06
			Req.	8.28	7.38	8.58
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	3.26	3.26	3.26
Active Defl.				0.17 mm, L/25796 (L: 4.50 m)		

1.25.- Frame 25



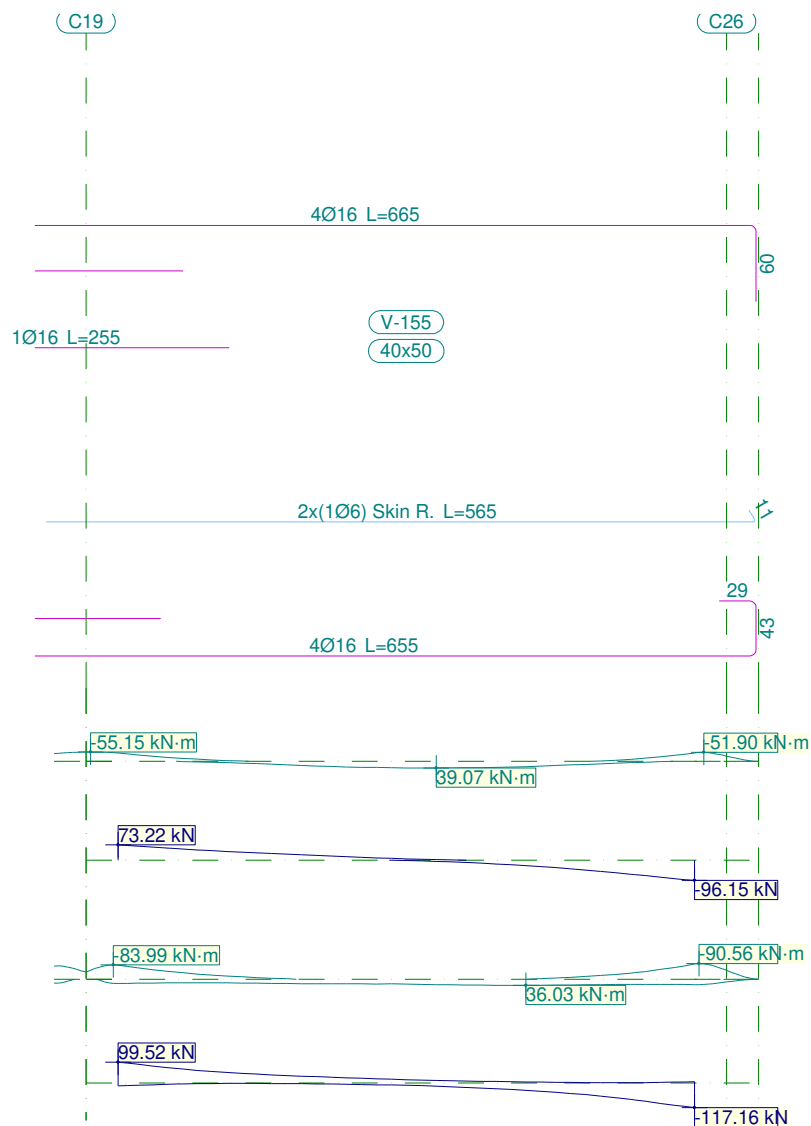


Beam reinforcement report

Frame 25				Span: V-152			Span: V-153			Span: V-154		
Section				40x60			40x50			40x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-367.43	--	-320.13	-76.49	-3.26	-34.15	-40.40	--	-45.16
		x	[m]	0.00	--	9.50	0.00	1.50	4.50	0.00	--	4.50
	Max Moment	[kN·m]		226.10	259.66	180.18	3.54	19.61	19.07	26.59	31.00	17.59
		x	[m]	3.12	4.40	6.38	1.46	2.86	3.02	1.45	2.02	3.09
	Min Shear	[kN]		--	-70.28	-305.60	--	-8.94	-53.42	--	-21.30	-64.17
		x	[m]	--	6.27	9.50	--	2.95	4.50	--	2.99	4.50
	Max Shear	[kN]		421.54	52.04	--	67.52	28.40	0.47	72.09	15.43	--
		x	[m]	0.00	3.23	--	0.00	1.50	3.02	0.00	1.55	--
	Min Torsion	[kN]		-2.91	--	--	-3.83	-2.35	-2.43	-4.31	--	--
		x	[m]	0.00	--	--	0.06	2.86	3.79	0.00	--	--
Max Torsion	[kN]		--	--	4.13	--	1.63	4.16	3.62	3.16	4.94	
	x	[m]	--	--	9.42	--	2.95	4.35	0.38	1.55	4.35	
Seismic situations	Min Moment.	[kN·m]		-316.30	--	-275.79	-97.39	-9.32	-67.04	-76.05	--	-75.53
		x	[m]	0.00	--	9.50	0.00	1.50	4.50	0.00	--	4.50
	Max Moment	[kN·m]		170.29	187.99	134.78	19.98	21.38	31.16	29.90	27.03	24.24
		x	[m]	3.12	4.28	6.38	0.00	2.95	4.50	0.00	1.55	4.50
	Min Shear	[kN]		--	-55.21	-252.88	-19.57	-18.68	-80.45	-14.79	-27.36	-88.41
		x	[m]	--	6.27	9.50	0.00	2.95	4.50	0.00	2.99	4.50
	Max Shear	[kN]		337.21	42.78	--	89.15	32.64	17.11	97.82	24.81	14.09
		x	[m]	0.00	3.23	--	0.00	1.50	4.50	0.00	1.55	4.50
	Min Torsion	[kN]		-6.14	--	-3.33	-6.19	-2.28	-4.40	-6.09	--	-1.57
		x	[m]	0.00	--	9.42	0.00	2.86	4.26	0.00	--	4.39
Max Torsion	[kN]		2.95	--	6.94	2.75	1.48	5.72	5.32	2.93	5.48	
	x	[m]	0.00	--	9.42	0.00	2.95	4.35	0.15	1.55	4.35	
Top Reinf. Area		[cm²]	Real	22.77	8.04	26.75	25.90	10.31	10.06	10.06	8.04	16.14
			Req.	21.37	7.86	19.05	13.71	7.26	8.06	8.61	6.08	8.65
Bot. Reinf. Area		[cm²]	Real	15.71	15.71	15.71	12.07	8.04	8.04	8.04	8.04	12.95
			Req.	12.14	12.80	13.37	12.95	6.08	6.08	6.08	6.08	8.07
Transv. Reinf. Area		[cm²/m]	Real	17.40	3.33	10.06	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	15.50	3.26	8.90	3.26	3.26	3.26	3.26	3.26	3.26
Active Defl.				13.67 mm, L/695 (L: 9.50 m)			0.17 mm, L/16686 (L: 2.79 m)			0.28 mm, L/15823 (L: 4.50 m)		



Beam reinforcement report



Frame 25			Span: V-155		
Section			40x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-48.33	--	-49.60
	x	[m]	0.00	--	4.50
	Max Moment	[kN·m]	24.40	39.07	33.37
	x	[m]	1.43	2.48	3.07
	Min Shear	[kN]	--	-17.53	-96.15
	x	[m]	--	2.95	4.50
	Max Shear	[kN]	73.22	22.49	--
	x	[m]	0.00	1.55	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

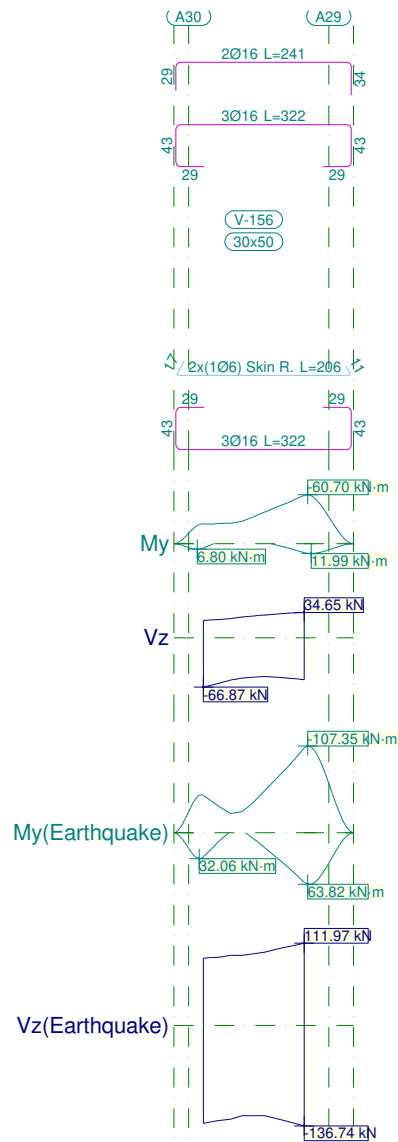


Beam reinforcement report

Frame 25				Span: V-155		
Section				40x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-82.29	--	-88.24
		[m]		0.00	--	4.50
	Max Moment x	[kN·m]		26.61	35.64	36.03
		[m]		1.43	2.95	3.18
	Min Shear x	[kN]		-13.34	-27.14	-117.16
		[m]		0.00	2.95	4.50
	Max Shear x	[kN]		99.52	30.09	6.28
		[m]		0.00	1.55	3.07
	Min Torsion x	[kN]		-2.49	--	-2.91
		[m]		0.00	--	4.35
Max Torsion x	[kN]		2.06	--	3.80	
	[m]		0.00	--	4.35	
Top Reinf. Area		[cm²]	Real	15.42	8.04	8.04
			Req.	6.33	6.08	6.21
Bot. Reinf. Area		[cm²]	Real	12.65	8.04	8.04
			Req.	7.71	6.08	6.08
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	3.26	3.26	3.26
Active Defl.				0.40 mm, L/11353 (L: 4.50 m)		



1.26.- Frame 26



Frame 26			Span: V-156		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-25.42	-39.30	-59.91
	x	[m]	0.28	0.63	1.03
	Max Moment	[kN·m]	5.16	--	10.87
	x	[m]	0.00	--	1.03
	Min Shear	[kN]	-66.87	-54.66	-57.13
	x	[m]	0.00	0.39	1.03
	Max Shear	[kN]	26.32	31.16	34.65
	x	[m]	0.28	0.63	1.03
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

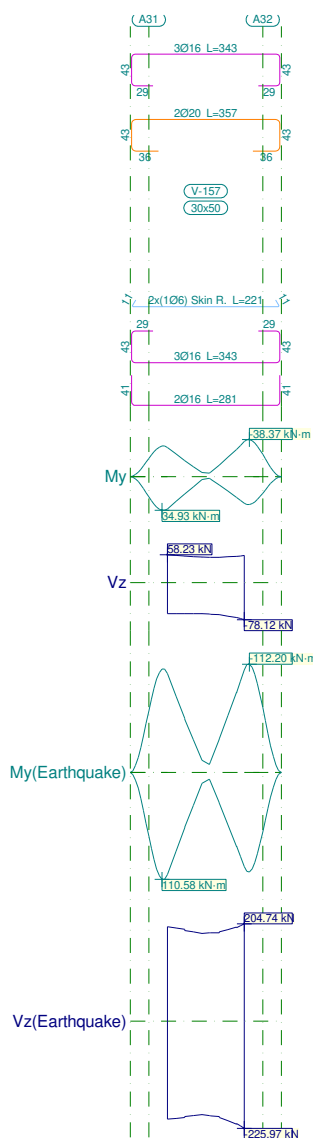


Beam reinforcement report

Frame 26				Span: V-156		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-46.16	-52.20	-104.67
		[m]		0.00	0.63	1.03
	Max Moment x	[kN·m]		29.88	18.58	61.33
		[m]		0.00	0.63	1.03
	Min Shear x	[kN]		-133.22	-122.91	-136.74
		[m]		0.00	0.63	1.03
	Max Shear x	[kN]		95.41	100.05	111.97
		[m]		0.28	0.63	1.03
	Min Torsion x	[kN]		--	--	-2.58
		[m]		--	--	0.86
Max Torsion x	[kN]		--	--	2.76	
	[m]		--	--	0.86	
Top Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	4.66	6.34	6.34
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.03	5.03	5.03
Transv. Reinf. Area		[cm²/m]	Real	2.57	2.57	2.57
			Req.	2.45	2.45	2.45
Active Defl.				0.14 mm, L/14536 (L: 2.05 m)		



1.27.- Frame 27



Frame 27			Span: V-157		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-30.26	-10.10	-36.28
	x	[m]	0.00	0.35	1.04
	Max Moment	[kN·m]	33.32	10.54	27.42
	x	[m]	0.00	0.35	1.04
	Min Shear	[kN]	-65.85	-66.62	-78.12
	x	[m]	0.00	0.58	1.04
	Max Shear	[kN]	58.23	54.71	56.89
	x	[m]	0.00	0.35	1.04
	Min Torsion	[kN]	-1.38	--	--
	x	[m]	0.00	--	--
	Max Torsion	[kN]	--	--	2.30
	x	[m]	--	--	0.93

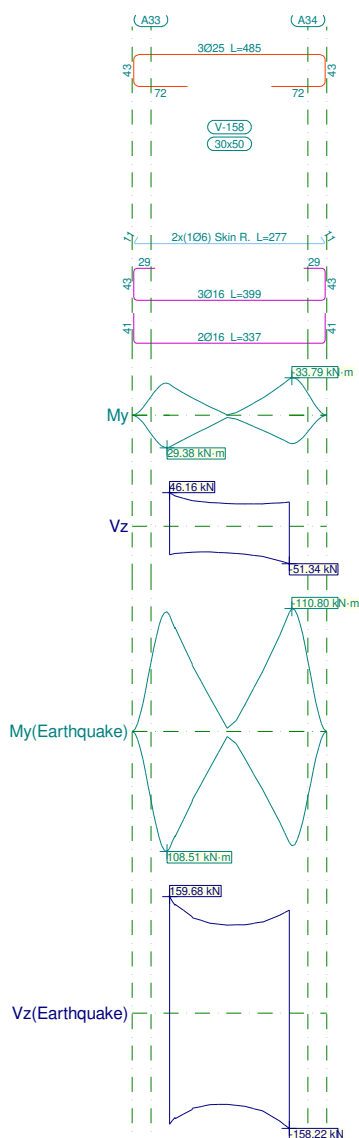


Beam reinforcement report

Frame 27				Span: V-157		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-102.54	-33.92	-106.23
		[m]		0.00	0.35	1.04
	Max Moment x	[kN·m]		105.60	33.87	97.37
		[m]		0.00	0.35	1.04
	Min Shear x	[kN]		-206.42	-199.27	-225.97
		[m]		0.00	0.58	1.04
	Max Shear x	[kN]		198.80	187.90	204.74
		[m]		0.00	0.35	1.04
	Min Torsion x	[kN]		-2.32	-1.57	-2.86
		[m]		0.00	0.57	0.93
Max Torsion x	[kN]		--	--	4.99	
	[m]		--	--	0.93	
Top Reinf. Area		[cm²]	Real	12.32	12.32	12.32
			Req.	6.35	6.35	9.84
Bot. Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	6.23	6.23	8.92
Transv. Reinf. Area		[cm²/m]	Real	8.09	8.09	8.09
			Req.	6.02	3.95	7.12
Active Defl.				0.02 mm, L/82960 (L: 2.07 m)		



1.28.- Frame 28



Frame 28			Span: V-158		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-28.01	-7.60	-32.68
	x	[m]	0.00	0.54	1.60
	Max Moment	[kN·m]	28.66	10.02	25.07
	x	[m]	0.00	0.54	1.60
	Min Shear	[kN]	-38.95	-38.26	-51.34
	x	[m]	0.00	1.00	1.60
	Max Shear	[kN]	46.16	32.70	33.24
	x	[m]	0.00	0.54	1.60
	Min Torsion	[kN]	-4.40	--	--
	x	[m]	0.00	--	--
	Max Torsion	[kN]	--	--	3.50
	x	[m]	--	--	1.47

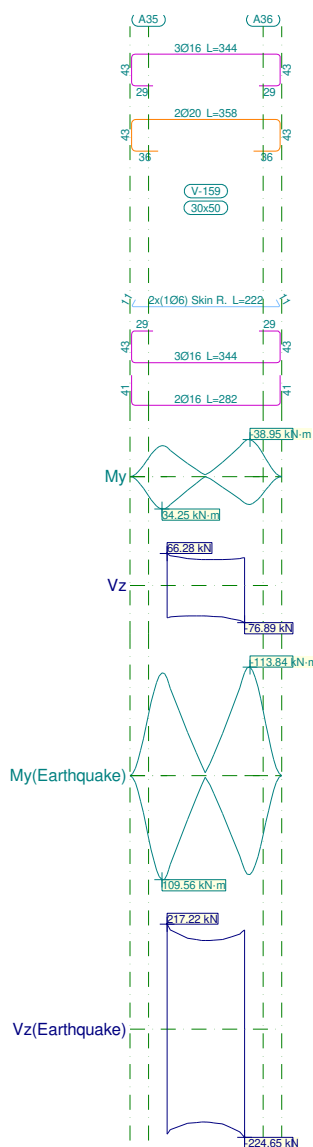


Beam reinforcement report

Frame 28				Span: V-158		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-104.79	-30.52	-107.49
		[m]		0.00	0.54	1.60
	Max Moment x	[kN·m]		105.40	32.88	100.33
		[m]		0.00	0.54	1.60
	Min Shear x	[kN]		-152.48	-128.02	-158.22
		[m]		0.00	1.00	1.60
	Max Shear x	[kN]		159.68	123.37	141.15
		[m]		0.00	0.54	1.60
	Min Torsion x	[kN]		-7.92	-1.65	-2.92
		[m]		0.00	0.54	1.47
Max Torsion x	[kN]		3.66	1.50	6.49	
	[m]		0.00	1.00	1.47	
Top Reinf. Area		[cm²]	Real	14.73	14.73	14.73
			Req.	9.64	5.57	9.81
Bot. Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	9.41	7.36	9.10
Transv. Reinf. Area		[cm²/m]	Real	5.66	5.66	5.66
			Req.	4.81	2.45	4.45
Active Defl.				0.00 mm, <L/1000 (L: 1.60 m)		



1.29.- Frame 29



Frame 29			Span: V-159		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-30.70	-7.59	-36.97
	x	[m]	0.00	0.63	1.05
	Max Moment	[kN·m]	32.54	7.09	27.75
	x	[m]	0.00	0.39	1.05
	Min Shear	[kN]	-66.93	-63.90	-76.89
	x	[m]	0.00	0.63	1.05
	Max Shear	[kN]	66.28	54.83	57.91
	x	[m]	0.00	0.39	1.05
	Min Torsion	[kN]	-4.34	--	--
	x	[m]	0.00	--	--
	Max Torsion	[kN]	--	--	3.80
	x	[m]	--	--	0.98

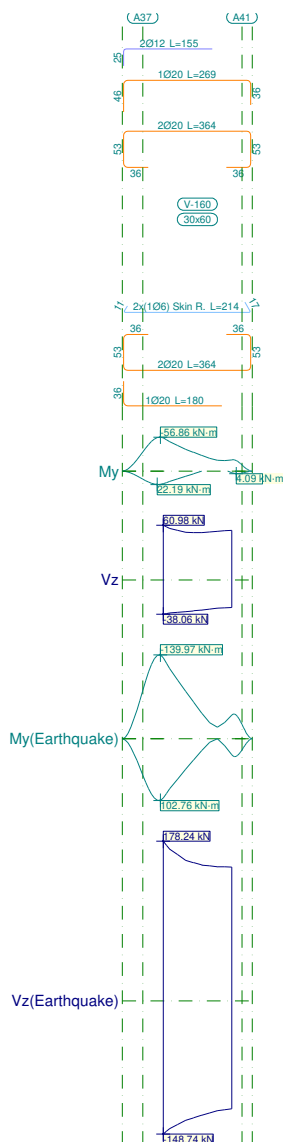


Beam reinforcement report

Frame 29				Span: V-159		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-102.05	-24.15	-108.03
		[m]		0.00	0.39	1.05
	Max Moment x	[kN·m]		103.88	23.80	98.82
		[m]		0.00	0.39	1.05
	Min Shear x	[kN]		-217.87	-194.33	-224.65
		[m]		0.00	0.63	1.05
	Max Shear x	[kN]		217.22	185.76	205.67
		[m]		0.00	0.39	1.05
	Min Torsion x	[kN]		-7.54	-1.44	-3.41
		[m]		0.00	0.51	0.98
Max Torsion x	[kN]		3.43	1.53	7.33	
	[m]		0.00	0.51	0.98	
Top Reinf. Area		[cm²]	Real	12.32	12.32	12.32
			Req.	9.57	6.73	9.94
Bot. Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	9.32	6.16	9.01
Transv. Reinf. Area		[cm²/m]	Real	9.43	9.43	9.43
			Req.	8.05	2.76	8.29
Active Defl.				0.03 mm, L/76792 (L: 2.09 m)		



1.30.- Frame 30



Frame 30			Span: V-160		
Section			30x60		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-55.42	-31.87	-21.23
	x	[m]	0.00	0.44	0.68
	Max Moment	[kN·m]	20.96	4.47	2.57
	x	[m]	0.00	0.44	1.01
	Min Shear	[kN]	-38.06	-34.50	-32.54
	x	[m]	0.00	0.44	0.68
	Max Shear	[kN]	60.98	53.11	55.35
	x	[m]	0.00	0.44	1.01
	Min Torsion	[kN]	-2.26	--	--
	x	[m]	0.00	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

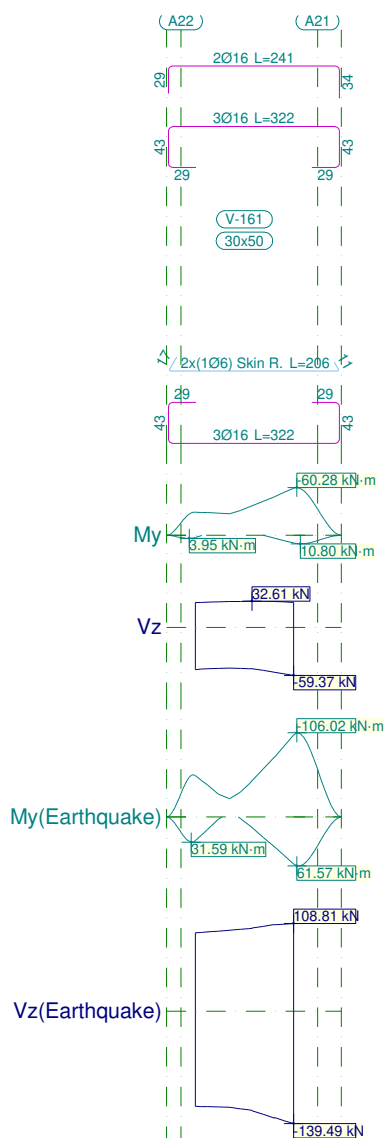


Beam reinforcement report

Frame 30				Span: V-160		
Section				30x60		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-135.35	-62.51	-39.83
		[m]		0.00	0.44	1.01
	Max Moment x	[kN·m]		98.70	36.32	26.60
		[m]		0.00	0.44	1.01
	Min Shear x	[kN]		-148.74	-130.80	-125.07
		[m]		0.00	0.44	0.68
	Max Shear x	[kN]		178.24	154.57	150.88
		[m]		0.00	0.44	0.68
	Min Torsion x	[kN]		-4.81	--	--
		[m]		0.00	--	--
Max Torsion x	[kN]		3.32	--	1.74	
	[m]		0.00	--	0.80	
Top Reinf. Area		[cm²]	Real	11.69	10.55	9.58
			Req.	10.67	6.79	5.65
Bot. Reinf. Area		[cm²]	Real	9.43	8.10	7.05
			Req.	8.63	5.64	5.52
Transv. Reinf. Area		[cm²/m]	Real	3.14	3.14	3.14
			Req.	2.76	2.45	2.45
Active Defl.				0.16 mm, L/12727 (L: 2.01 m)		



1.31.- Frame 31



Frame 31			Span: V-161		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-28.94	-36.98	-59.42
	x	[m]	0.00	0.59	1.03
	Max Moment	[kN·m]	2.77	--	9.79
	x	[m]	0.00	--	1.03
	Min Shear	[kN]	-52.06	-51.20	-59.37
	x	[m]	0.00	0.59	1.03
	Max Shear	[kN]	31.98	32.61	32.56
	x	[m]	0.24	0.59	0.71
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

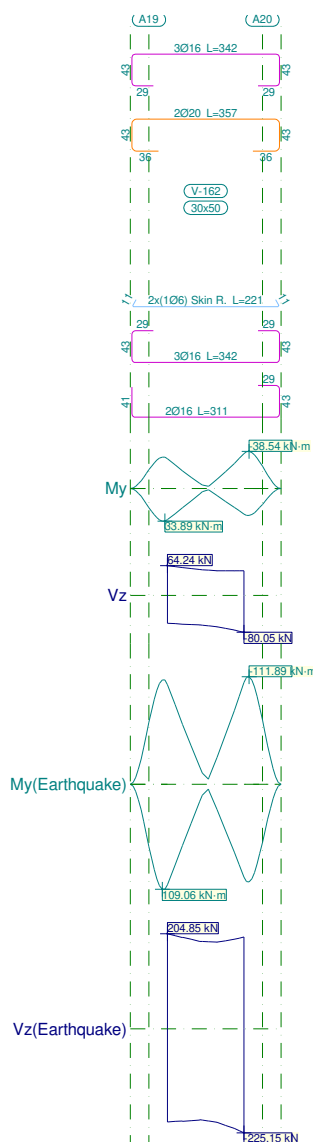


Beam reinforcement report

Frame 31				Span: V-161		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-52.29	-45.83	-103.23
		[m]		0.00	0.59	1.03
	Max Moment x	[kN·m]		29.74	13.30	59.14
		[m]		0.00	0.59	1.03
	Min Shear x	[kN]		-118.83	-123.60	-139.49
		[m]		0.24	0.59	1.03
	Max Shear x	[kN]		99.21	103.06	108.81
		[m]		0.24	0.59	1.03
	Min Torsion x	[kN]		-1.44	--	-1.96
		[m]		0.00	--	0.83
Max Torsion x	[kN]		--	--	1.73	
	[m]		--	--	0.83	
Top Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	4.66	6.09	6.26
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.03	5.03	5.03
Transv. Reinf. Area		[cm²/m]	Real	2.83	2.83	2.83
			Req.	2.45	2.45	2.46
Active Defl.				0.27 mm, L/7630 (L: 2.05 m)		



1.32.- Frame 32



Frame 32			Span: V-162		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-31.02	-9.44	-36.36
	x	[m]	0.00	0.67	1.03
	Max Moment	[kN·m]	32.49	7.47	26.66
	x	[m]	0.00	0.67	1.03
	Min Shear	[kN]	-63.06	-68.02	-80.05
	x	[m]	0.32	0.67	1.03
	Max Shear	[kN]	64.24	55.41	52.91
	x	[m]	0.00	0.43	1.03
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

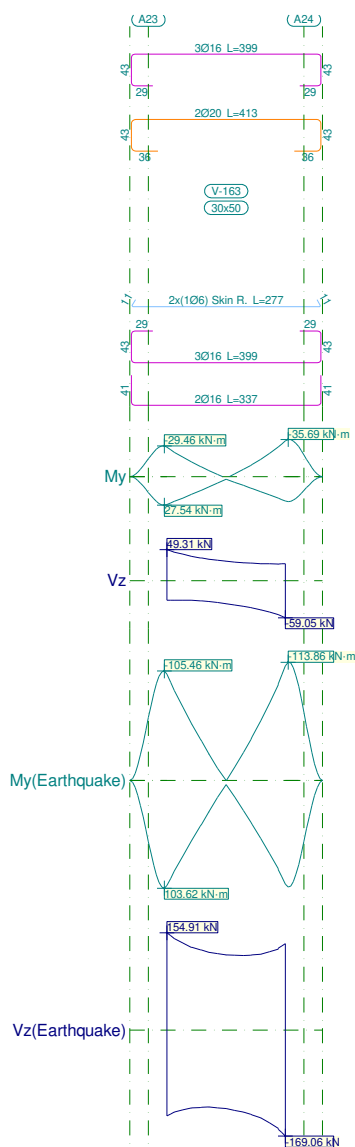


Beam reinforcement report

Frame 32				Span: V-162		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-103.72	-28.16	-105.94
		[m]		0.00	0.67	1.03
	Max Moment x	[kN·m]		104.27	26.18	96.25
		[m]		0.00	0.67	1.03
	Min Shear x	[kN]		-201.37	-201.96	-225.15
		[m]		0.00	0.67	1.03
	Max Shear x	[kN]		204.85	188.70	198.05
		[m]		0.00	0.43	1.03
	Min Torsion x	[kN]		-2.28	-1.39	-2.74
		[m]		0.00	0.43	0.90
Max Torsion x	[kN]		2.88	1.54	1.90	
	[m]		0.00	0.43	0.90	
Top Reinf. Area		[cm²]	Real	12.32	12.32	12.32
			Req.	9.63	6.64	6.64
Bot. Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	9.34	6.16	6.16
Transv. Reinf. Area		[cm²/m]	Real	8.09	8.09	8.09
			Req.	5.92	3.61	7.07
Active Defl.				0.02 mm, L/96340 (L: 2.06 m)		



1.33.- Frame 33



Frame 33			Span: V-163		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-28.37	-6.83	-34.37
	x	[m]	0.00	1.03	1.60
	Max Moment	[kN·m]	27.02	9.93	23.65
	x	[m]	0.00	0.57	1.60
	Min Shear	[kN]	-32.29	-40.81	-59.05
	x	[m]	0.47	1.03	1.60
	Max Shear	[kN]	49.31	33.95	27.84
	x	[m]	0.00	0.57	1.13
	Min Torsion	[kN]	--	--	-1.87
	x	[m]	--	--	1.50
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

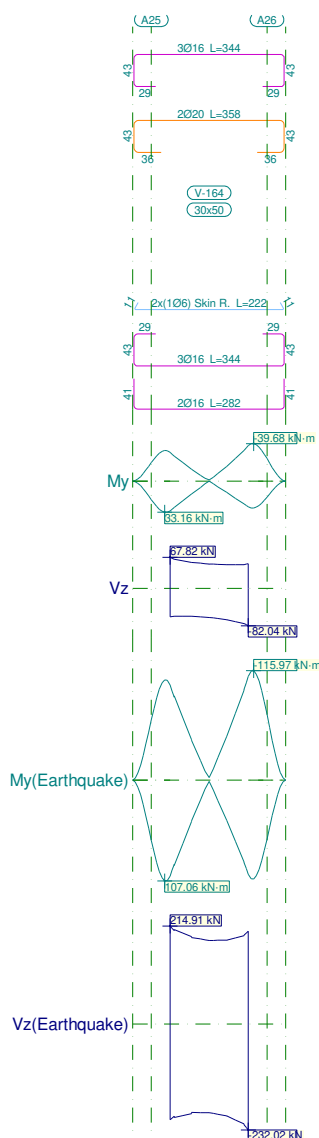


Beam reinforcement report

Frame 33				Span: V-163		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-102.23	-26.97	-110.26
		[m]		0.00	1.03	1.60
	Max Moment x	[kN·m]		100.91	30.00	99.83
		[m]		0.00	0.57	1.60
	Min Shear x	[kN]		-136.96	-130.59	-169.06
		[m]		0.00	1.03	1.60
	Max Shear x	[kN]		154.91	123.76	137.17
		[m]		0.00	0.57	1.60
	Min Torsion x	[kN]		-3.77	-1.46	-6.47
		[m]		0.00	1.03	1.50
Max Torsion x	[kN]		4.39	1.55	5.17	
	[m]		0.00	1.03	1.50	
Top Reinf. Area		[cm²]	Real	12.32	12.32	12.32
			Req.	9.43	5.48	9.95
Bot. Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	9.13	6.16	9.07
Transv. Reinf. Area		[cm²/m]	Real	4.35	4.35	4.35
			Req.	3.10	2.45	3.94
Active Defl.				0.01 mm, L/148952 (L: 1.60 m)		



1.34.- Frame 34



Frame 34			Span: V-164		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-30.53	-7.94	-37.45
	x	[m]	0.00	0.64	1.05
	Max Moment	[kN·m]	31.63	6.75	27.38
	x	[m]	0.00	0.41	1.05
	Min Shear	[kN]	-62.67	-66.44	-82.04
	x	[m]	0.00	0.64	1.05
	Max Shear	[kN]	67.82	54.92	53.44
	x	[m]	0.00	0.41	1.05
	Min Torsion	[kN]	--	--	-2.21
	x	[m]	--	--	0.99
	Max Torsion	[kN]	1.58	--	--
	x	[m]	0.00	--	--

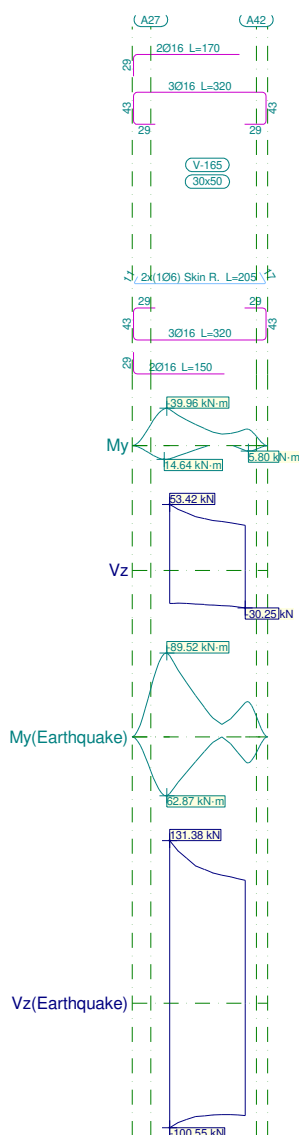


Beam reinforcement report

Frame 34				Span: V-164		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-100.59	-23.62	-109.88
		[m]		0.00	0.64	1.05
	Max Moment x	[kN·m]		101.69	21.89	99.81
		[m]		0.00	0.64	1.05
	Min Shear x	[kN]		-209.76	-197.76	-232.02
		[m]		0.00	0.64	1.05
	Max Shear x	[kN]		214.91	186.32	203.41
		[m]		0.00	0.41	1.05
	Min Torsion x	[kN]		-4.43	-1.62	-8.24
		[m]		0.00	0.52	0.99
Max Torsion x	[kN]		5.49	1.72	6.47	
	[m]		0.00	0.52	0.99	
Top Reinf. Area		[cm²]	Real	12.32	12.32	12.32
			Req.	9.48	6.86	10.08
Bot. Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	9.18	6.16	9.07
Transv. Reinf. Area		[cm²/m]	Real	9.43	9.43	9.43
			Req.	6.46	2.86	7.49
Active Defl.				0.03 mm, L/73275 (L: 2.09 m)		



1.35.- Frame 35



Frame 35			Span: V-165		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-38.88	-22.78	-17.65
	x	[m]	0.00	0.35	1.01
	Max Moment	[kN·m]	14.02	4.46	5.02
	x	[m]	0.00	0.35	1.01
	Min Shear	[kN]	-26.64	-27.96	-30.25
	x	[m]	0.00	0.58	1.01
	Max Shear	[kN]	53.42	43.54	39.52
	x	[m]	0.00	0.35	0.70
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	1.83	--	--
	x	[m]	0.00	--	--

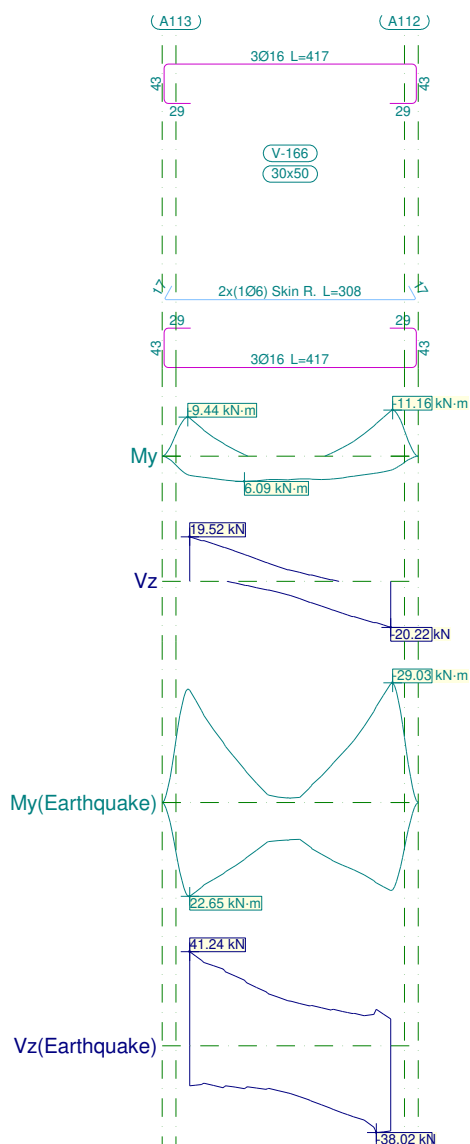


Beam reinforcement report

Frame 35				Span: V-165		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-86.74	-44.04	-36.47
		[m]		0.00	0.35	1.01
	Max Moment x	[kN·m]		60.65	26.48	26.26
		[m]		0.00	0.35	1.01
	Min Shear x	[kN]		-100.55	-91.63	-90.76
		[m]		0.00	0.35	1.01
	Max Shear x	[kN]		131.38	111.04	103.50
		[m]		0.00	0.35	0.70
	Min Torsion x	[kN]		-2.44	--	--
		[m]		0.00	--	--
Max Torsion x	[kN]		3.84	--	--	
	[m]		0.00	--	--	
Top Reinf. Area		[cm²]	Real	10.06	9.13	7.28
			Req.	8.44	5.25	4.56
Bot. Reinf. Area		[cm²]	Real	10.06	8.71	6.28
			Req.	6.71	4.66	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.17 mm, L/11911 (L: 2.02 m)		



1.36.- Frame 36



Frame 36			Span: V-166		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-9.21	--	-10.95
	x	[m]	0.00	--	2.18
	Max Moment	[kN·m]	6.09	5.74	5.53
	x	[m]	0.59	0.83	1.53
	Min Shear	[kN]	-2.78	-10.87	-20.22
	x	[m]	0.72	1.42	2.18
	Max Shear	[kN]	19.52	8.28	0.68
	x	[m]	0.00	0.83	1.53
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

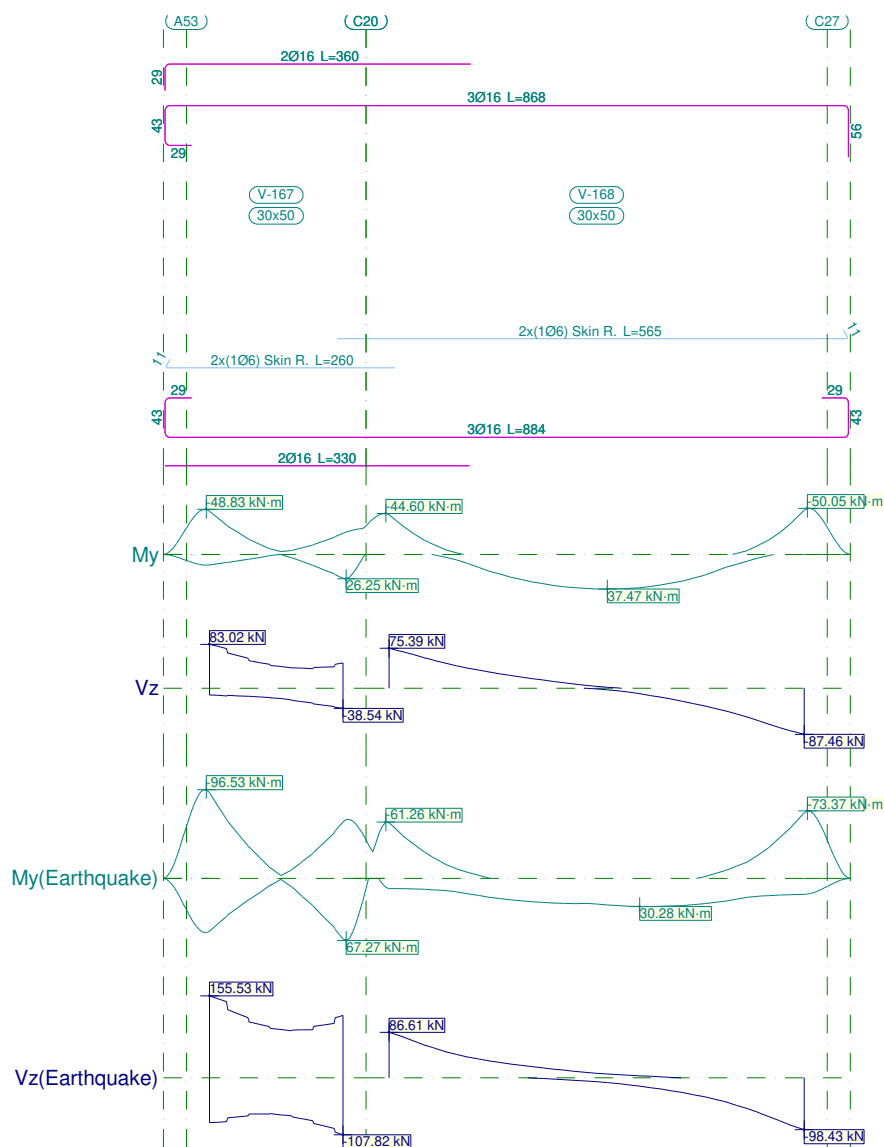


Beam reinforcement report

Frame 36				Span: V-166		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-27.22	-6.42	-28.79
		[m]		0.00	1.42	2.18
	Max Moment x	[kN·m]		22.65	12.43	21.23
		[m]		0.00	1.42	2.18
	Min Shear x	[kN]		-18.80	-25.82	-38.02
		[m]		0.59	1.42	2.02
	Max Shear x	[kN]		41.24	23.70	15.91
		[m]		0.00	0.83	1.56
	Min Torsion x	[kN]		-2.44	-1.60	-1.62
		[m]		0.36	0.83	1.99
Max Torsion x	[kN]		2.31	--	1.41	
	[m]		0.36	--	1.99	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.03 mm, L/62648 (L: 2.18 m)		



1.37.- Frame 37



Frame 37			Span: V-167			Span: V-168		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-46.99	-11.22	-22.93	-43.20	--	-48.05
		[m]	0.00	0.54	1.45	0.00	--	4.50
	Max Moment	[kN·m]	11.37	3.79	25.83	27.17	37.47	30.98
		[m]	0.00	0.90	1.45	1.43	2.37	3.07
	Min Shear	[kN]	-15.85	-23.49	-38.54	--	-17.44	-87.46
		[m]	0.47	0.90	1.45	--	2.95	4.50
	Max Shear	[kN]	83.02	48.55	47.41	75.39	18.18	--
		[m]	0.00	0.54	1.45	0.00	1.55	--
	Min Torsion	[kN]	--	--	--	--	--	--
		[m]	--	--	--	--	--	--
	Max Torsion	[kN]	6.17	3.47	1.83	--	--	--
		[m]	0.18	0.65	1.12	--	--	--

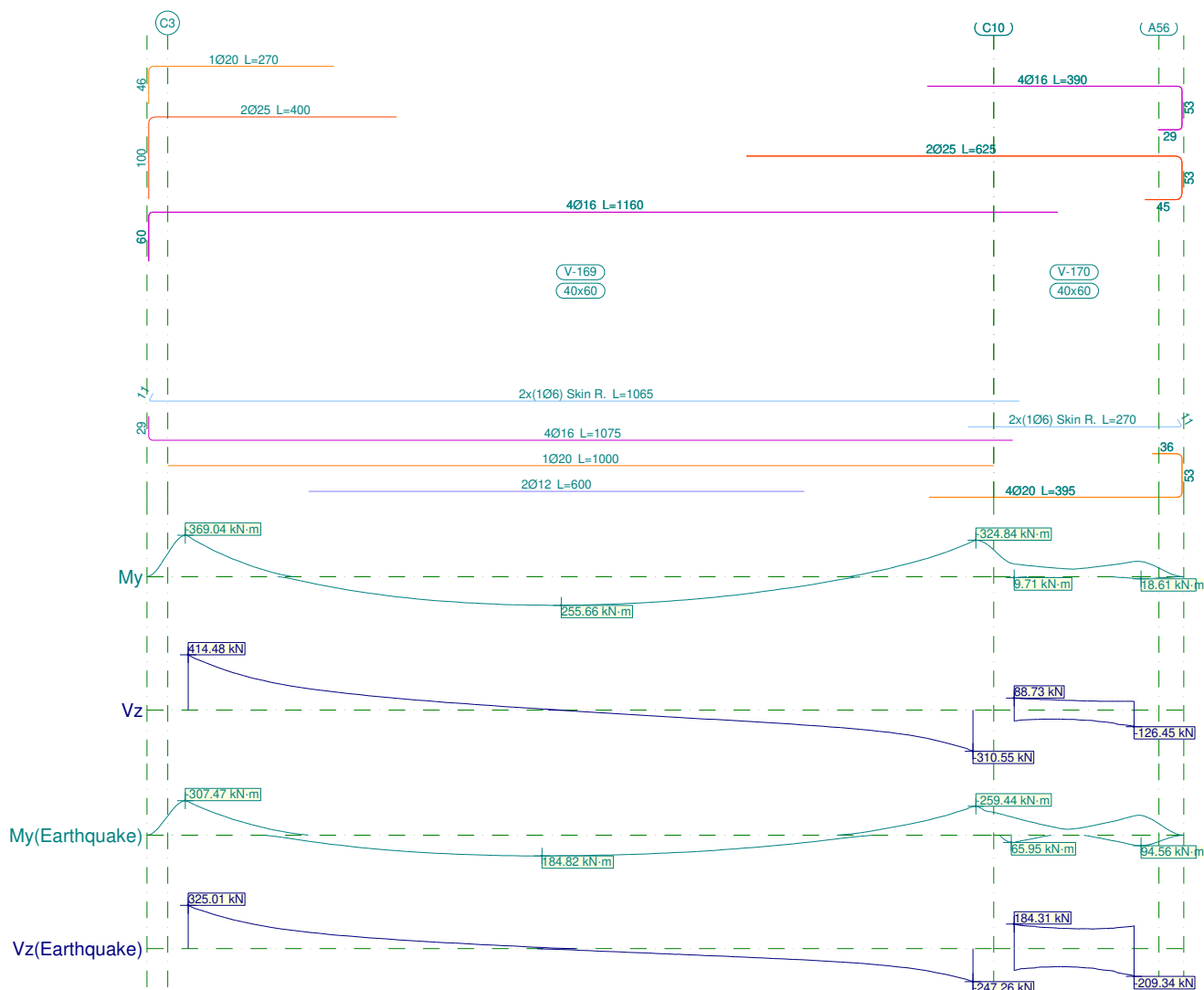


Beam reinforcement report

Frame 37				Span: V-167			Span: V-168		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-93.10	-23.16	-61.45	-60.72	--	-71.38
		[m]		0.00	0.54	1.45	0.00	--	4.50
	Max Moment x	[kN·m]		57.02	15.39	65.66	24.03	30.28	29.82
		[m]		0.00	0.54	1.45	1.43	2.72	3.07
	Min Shear x	[kN]		-84.86	-74.19	-107.82	--	-21.42	-98.43
		[m]		0.00	0.90	1.45	--	2.95	4.50
	Max Shear x	[kN]		155.53	101.53	118.62	86.61	21.05	0.84
		[m]		0.00	0.54	1.45	0.00	1.55	3.07
	Min Torsion x	[kN]		-1.44	--	-2.30	-1.45	--	-1.86
		[m]		0.18	--	1.35	0.00	--	4.35
Max Torsion x	[kN]		7.15	3.04	3.23	1.55	--	1.66	
	[m]		0.18	0.65	1.35	0.00	--	4.35	
Top Reinf. Area		[cm²]	Real	10.06	10.06	10.06	10.06	6.03	6.03
			Req.	8.87	6.94	6.93	5.03	4.56	4.66
Bot. Reinf. Area		[cm²]	Real	10.06	10.06	10.06	10.06	6.03	6.03
			Req.	6.50	5.56	7.11	5.03	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	4.72	4.72	4.72	2.46	2.46	2.46
			Req.	4.19	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.02 mm, L/58770 (L: 0.98 m)			0.55 mm, L/8159 (L: 4.50 m)		



1.38.- Frame 38



Frame 38			Span: V-169			Span: V-170		
Section			40x60			40x60		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-361.54	--	-318.26	-112.87	-84.47	-135.71
	x	[m]	0.00	--	9.50	0.00	0.96	1.45
	Max Moment	[kN·m]	220.80	255.66	182.39	9.71	--	15.97
	x	[m]	3.12	4.52	6.38	0.00	--	1.45
	Min Shear	[kN]	--	-68.08	-310.55	-84.71	-80.44	-126.45
	x	[m]	--	6.27	9.50	0.00	0.96	1.45
	Max Shear	[kN]	414.48	52.00	--	88.73	75.81	66.51
	x	[m]	0.00	3.23	--	0.00	0.49	0.99
	Min Torsion	[kN]	--	--	-1.79	--	--	-3.44
	x	[m]	--	--	9.42	--	--	1.25
	Max Torsion	[kN]	--	--	--	2.37	3.40	3.53
	x	[m]	--	--	--	0.26	0.96	1.19

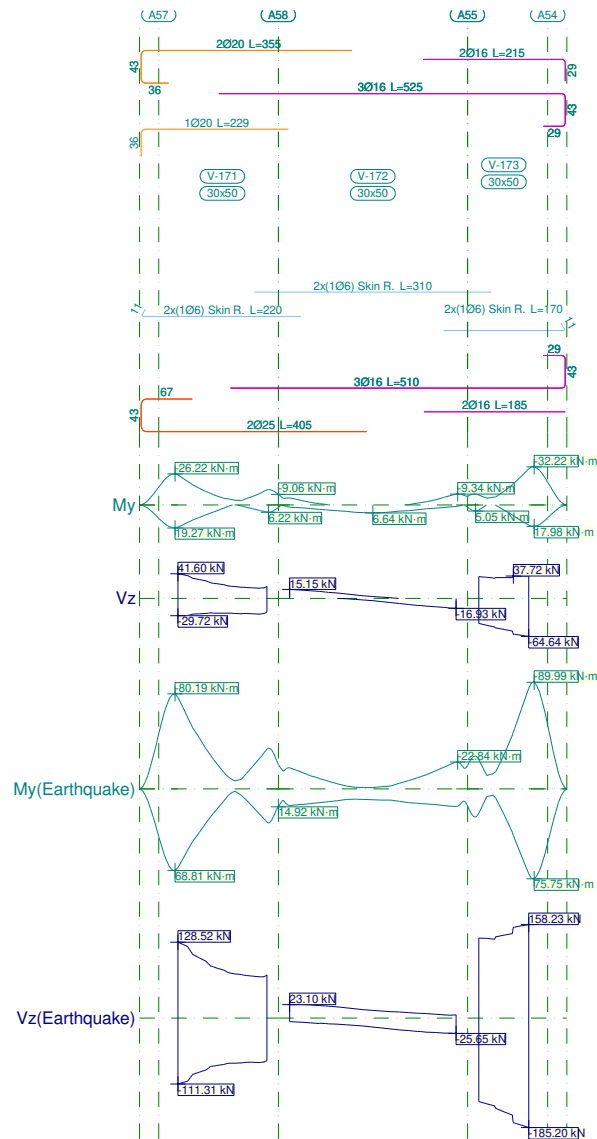


Beam reinforcement report

Frame 38				Span: V-169			Span: V-170		
Section				40x60			40x60		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-301.86	--	-256.68	-157.44	-86.11	-173.73
		[m]		0.00	--	9.50	0.00	0.96	1.45
	Max Moment x	[kN·m]		165.26	184.82	134.96	65.01	15.53	89.27
		[m]		3.12	4.28	6.38	0.00	0.96	1.45
	Min Shear x	[kN]		--	-51.52	-247.26	-165.10	-146.82	-209.34
		[m]		--	6.27	9.50	0.00	0.96	1.45
	Max Shear x	[kN]		325.01	41.24	--	184.31	155.88	171.81
		[m]		0.00	3.23	--	0.00	0.49	1.45
	Min Torsion x	[kN]		-3.92	--	-5.42	-3.03	--	-4.99
		[m]		0.00	--	9.42	0.00	--	1.42
Max Torsion x	[kN]		4.45	--	4.76	4.20	3.80	7.15	
	[m]		0.00	--	9.42	0.00	0.96	1.42	
Top Reinf. Area		[cm²]	Real	21.00	8.04	23.73	23.42	18.22	17.86
			Req.	18.88	6.72	16.60	11.84	8.69	13.72
Bot. Reinf. Area		[cm²]	Real	13.45	13.45	16.97	12.57	12.57	12.57
			Req.	11.82	12.55	11.86	11.71	9.11	9.30
Transv. Reinf. Area		[cm²/m]	Real	17.40	3.33	10.77	3.33	3.33	3.33
			Req.	15.16	3.26	9.42	3.26	3.26	3.26
Active Defl.				14.47 mm, L/657 (L: 9.50 m)			0.43 mm, L/6738 (L: 2.90 m)		



1.39.- Frame 39



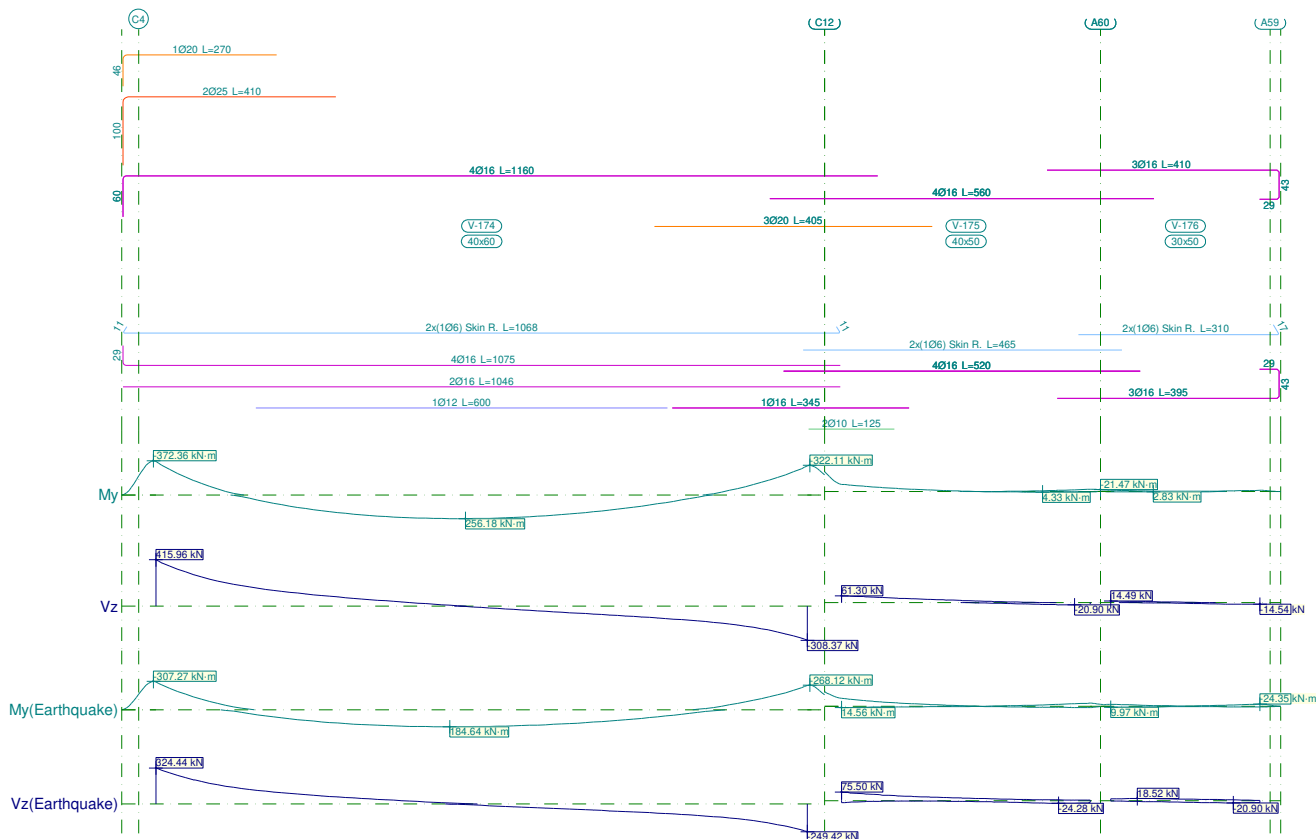


Beam reinforcement report

Frame 39				Span: V-171			Span: V-172			Span: V-173		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment. x	[kN·m]		-25.3 1	-10. 52	-12. 74	-6.0 4	--	-9.1 2	-8.45	-11.5 8	-30.5 2
		[m]		0.00	0.40	1.17	0.00	--	2.18	0.00	0.33	0.65
	Max Moment x	[kN·m]		18.63	7.60	6.02	4.78	6.64	4.73	4.19	4.39	16.94
		[m]		0.00	0.40	1.17	0.62	1.09	1.56	0.00	0.33	0.65
	Min Shear x	[kN]		-29.7 2	-25. 58	-26. 61	--	-9.0 7	-16. 93	-49.3 7	-52.9 5	-64.6 4
		[m]		0.00	0.75	1.07	--	1.44	2.18	0.21	0.33	0.65
	Max Shear x	[kN]		41.60	27.8 4	20.3 7	15.1 5	7.33	--	36.61	35.20	37.72
		[m]		0.00	0.40	1.17	0.00	0.74	--	0.00	0.33	0.45
	Min Torsion x	[kN]		--	--	--	--	--	--	--	--	--
		[m]		--	--	--	--	--	--	--	--	--
Max Torsion x	[kN]		2.76	2.13	--	--	--	--	2.54	2.54	3.08	
	[m]		0.13	0.40	--	--	--	--	0.20	0.22	0.44	
Seismic situations	Min Moment. x	[kN·m]		-77.3 6	-31. 23	-33. 64	-17. 96	-4.8 5	-22. 70	-24.7 1	-29.1 3	-84.9 8
		[m]		0.00	0.40	1.17	0.00	1.44	2.18	0.00	0.33	0.65
	Max Moment x	[kN·m]		66.35	26.1 6	27.9 8	13.8 6	10.4 3	14.7 7	20.45	21.39	71.40
		[m]		0.00	0.40	1.17	0.00	1.44	2.18	0.00	0.33	0.65
	Min Shear x	[kN]		-111. 31	-84. 71	-75. 94	-10. 29	-19. 65	-25. 65	-150. 52	-158. 31	-185. 20
		[m]		0.00	0.40	0.83	0.62	1.44	2.18	0.21	0.33	0.65
	Max Shear x	[kN]		128.5 2	92.3 9	73.7 4	23.1 0	17.4 2	9.34	135.6 9	140.5 6	158.2 3
		[m]		0.00	0.40	0.83	0.00	0.74	1.56	0.21	0.33	0.65
	Min Torsion x	[kN]		-1.60	--	-1.4 7	--	--	--	--	--	-2.39
		[m]		0.20	--	1.13	--	--	--	--	--	0.44
Max Torsion x	[kN]		4.51	3.39	1.65	--	--	--	3.31	3.31	5.60	
	[m]		0.20	0.43	0.83	--	--	--	0.20	0.22	0.44	
Top Reinf. Area		[cm²]	Real	9.43	10.2 5	12.1 9	11.4 4	6.55	8.31	10.06	10.06	10.06
			Req.	7.90	7.90	7.39	7.39	4.56	4.56	8.17	8.44	8.47
Bot. Reinf. Area		[cm²]	Real	9.82	10.4 4	14.7 8	14.7 8	8.36	8.94	10.06	10.06	10.06
			Req.	7.09	7.09	6.09	5.72	4.56	4.56	7.35	7.35	7.35
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	2.46	2.46	2.46	5.66	5.66	5.66
			Req.	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	4.71
Active Defl.				0.05 mm, L/42577 (L: 2.33 m)			0.03 mm, L/76579 (L: 2.18 m)			0.02 mm, L/57875 (L: 1.30 m)		



1.40.- Frame 40



Frame 40			Span: V-174			Span: V-175			Span: V-176		
Section			40x60			40x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-364.8	--	-316.3	-79.1	-18.8	-25.9	-14.9	-4.87	-14.3
			8	--	7	4	8	0	6	1	7
	x	[m]	0.00	--	9.50	0.00	1.25	3.63	0.00	1.44	2.18
	Max Moment	[kN·m]	221.8	256.1	181.7	--	2.23	4.33	2.83	2.62	--
			8	8	0	--					
	x	[m]	3.12	4.52	6.38	--	2.33	2.93	0.62	0.74	--
	Min Shear	[kN]	--	-68.0	-308.3	--	-6.47	-20.9	-2.36	-10.9	-14.5
			--	4	7	--		0		1	4
	x	[m]	--	6.27	9.50	--	2.33	3.40	0.62	1.44	2.18
	Max Shear	[kN]	415.9	52.41	--	61.3	30.4	6.93	14.4	7.41	--
			6			0	0		9		
	x	[m]	0.00	3.23	--	0.00	1.25	2.42	0.00	0.74	--
	Min Torsion	[kN]	--	--	--	-1.91	--	--	--	--	--
			--	--	--						
	x	[m]	--	--	--	0.00	--	--	--	--	--
	Max Torsion	[kN]	--	--	--	1.82	2.15	2.97	--	--	--
			--	--	--						
	x	[m]	--	--	--	0.32	2.19	3.12	--	--	--

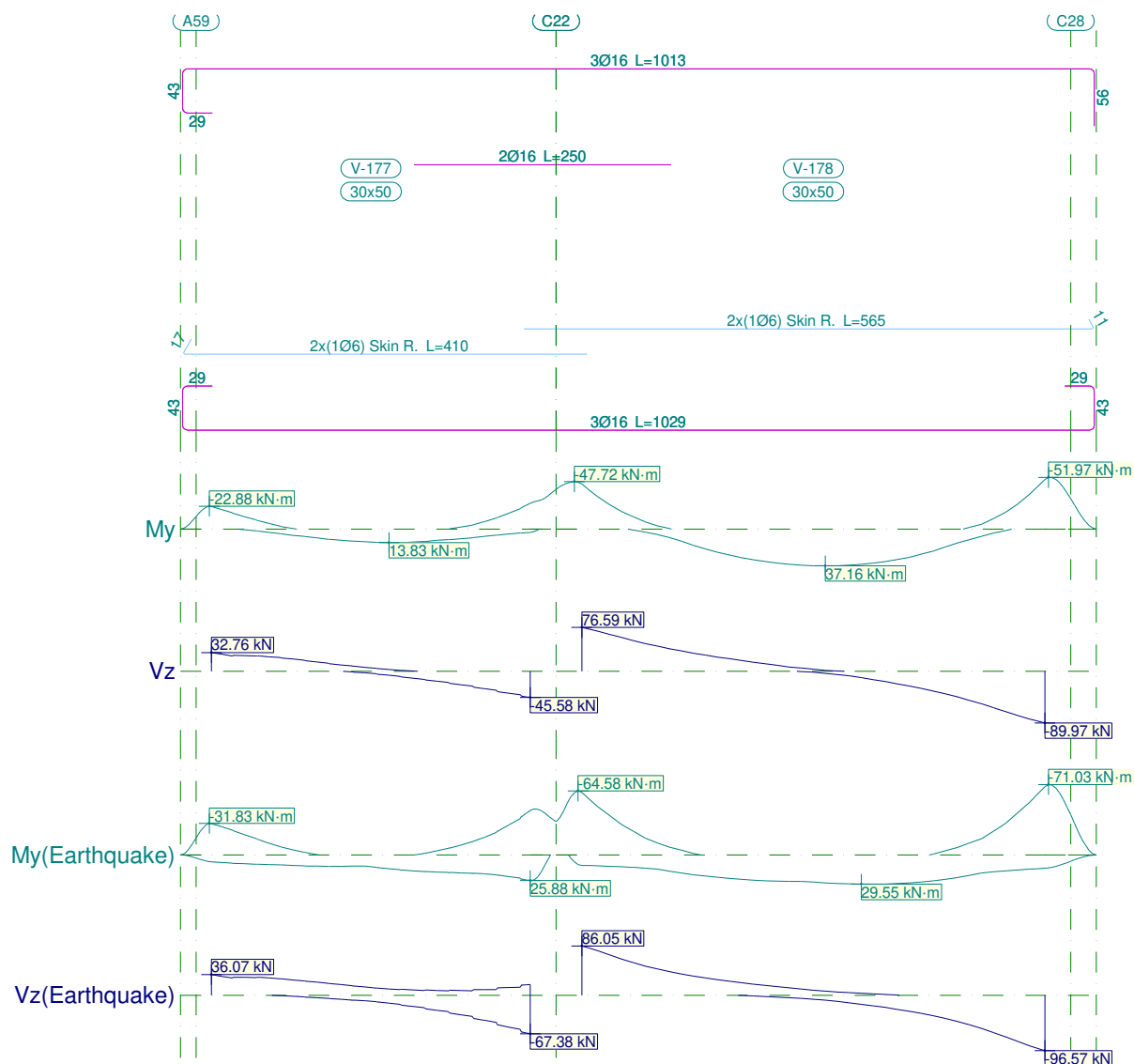


Beam reinforcement report

Frame 40				Span: V-174			Span: V-175			Span: V-176		
Section				40x60			40x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-301.68	--	-264.27	-87.66	-20.49	-34.18	-21.86	-7.52	-24.35
		[m]		0.00	--	9.50	0.00	1.25	3.63	0.00	1.44	2.18
	Max Moment x	[kN·m]		164.76	184.64	134.04	14.56	4.61	12.30	9.97	5.27	7.66
		[m]		3.12	4.28	6.38	0.00	1.25	3.63	0.00	0.74	2.18
	Min Shear x	[kN]		--	-52.06	-249.42	-18.94	-13.19	-24.28	-10.18	-18.59	-20.90
		[m]		--	6.27	9.50	0.00	2.33	3.16	0.62	1.44	1.79
	Max Shear x	[kN]		324.44	41.54	--	75.50	32.84	13.13	18.52	16.49	8.96
		[m]		0.00	3.23	--	0.00	1.25	2.42	0.39	0.74	1.55
	Min Torsion x	[kN]		-4.37	--	-5.00	-3.54	--	--	--	--	--
		[m]		0.00	--	9.42	0.00	--	--	--	--	--
	Max Torsion x	[kN]		4.12	--	5.19	2.94	2.03	3.38	--	--	--
		[m]		0.00	--	9.42	0.09	2.19	3.12	--	--	--
Top Reinf. Area		[cm²]	Real	21.00	8.04	23.27	23.02	8.71	13.04	12.66	6.03	6.03
			Req.	19.06	6.60	16.35	13.36	6.38	6.51	5.97	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	13.20	13.20	13.20	11.63	8.04	13.03	11.95	6.03	6.03
			Req.	11.88	12.57	11.63	11.51	6.08	6.52	6.33	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	17.40	3.33	10.47	3.33	3.33	3.33	2.46	2.46	2.46
			Req.	15.25	3.26	9.22	3.26	3.26	3.26	2.45	2.45	2.45
Active Defl.				14.78 mm, L/643 (L: 9.50 m)			0.17 mm, L/21304 (L: 3.63 m)			0.03 mm, L/68450 (L: 2.18 m)		



1.41.- Frame 41



Frame 41			Span: V-177			Span: V-178		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-22.61	--	-25.85	-45.36	--	-49.93
	x	[m]	0.00	--	3.10	0.00	--	4.50
	Max Moment	[kN·m]	9.05	13.83	12.72	26.29	37.16	30.83
	x	[m]	1.03	1.73	2.07	1.43	2.37	3.07
	Min Shear	[kN]	--	-11.81	-45.58	--	-17.84	-89.97
	x	[m]	--	1.96	3.10	--	2.95	4.50
	Max Shear	[kN]	32.76	14.50	--	76.59	18.89	--
	x	[m]	0.00	1.13	--	0.00	1.55	--
	Min Torsion	[kN]	-2.59	-2.38	-1.90	--	--	--
	x	[m]	0.67	1.13	2.77	--	--	--
	Max Torsion	[kN]	--	--	1.52	--	--	--
	x	[m]	--	--	3.02	--	--	--

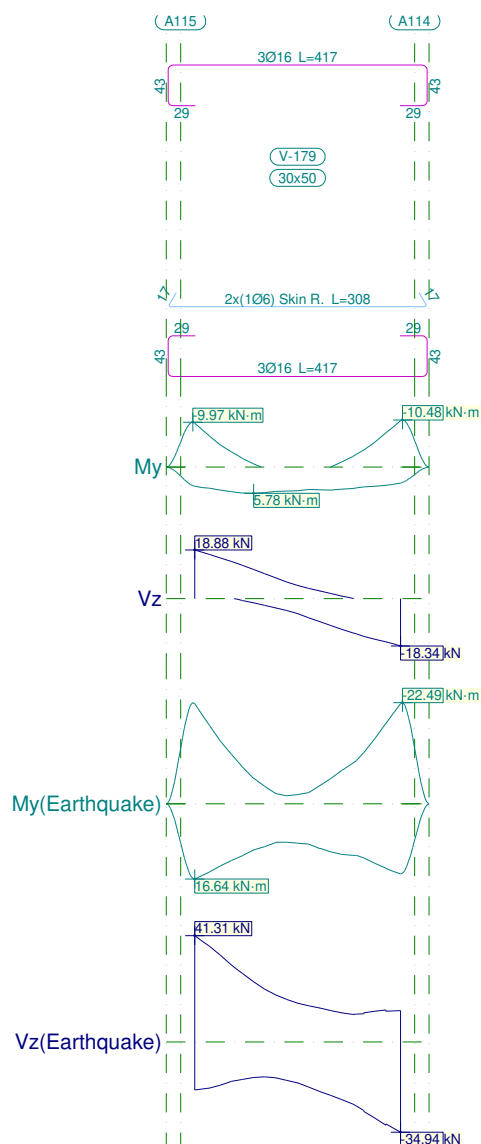


Beam reinforcement report

Frame 41				Span: V-177			Span: V-178		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-31.67	--	-44.86	-63.19	--	-69.06
		[m]		0.00	--	3.10	0.00	--	4.50
	Max Moment x	[kN·m]		11.27	15.94	25.88	23.63	29.55	28.76
		[m]		1.03	1.96	3.10	1.43	2.72	3.07
	Min Shear x	[kN]		-4.26	-19.57	-67.38	--	-21.28	-96.57
		[m]		1.03	1.96	3.10	--	2.95	4.50
	Max Shear x	[kN]		36.07	21.06	18.62	86.05	21.80	0.16
		[m]		0.00	1.13	3.10	0.00	1.55	3.07
	Min Torsion x	[kN]		-2.42	-1.93	-3.20	-1.54	--	-1.68
		[m]		0.67	1.13	3.02	0.00	--	4.35
Max Torsion x	[kN]		--	--	2.29	1.49	--	1.97	
	[m]		--	--	3.02	0.00	--	4.35	
Top Reinf. Area		[cm²]	Real	6.03	6.03	10.06	10.06	6.03	6.03
			Req.	4.56	4.56	5.87	4.66	4.56	4.66
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	5.03	5.03	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	2.46	2.46	2.46
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.12 mm, L/25707 (L: 3.00 m)			0.53 mm, L/8541 (L: 4.50 m)		



1.42.- Frame 42



Frame 42			Span: V-179		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-9.76	--	-10.30
	x	[m]	0.00	--	2.18
	Max Moment	[kN·m]	5.78	5.70	4.91
	x	[m]	0.62	0.74	1.56
	Min Shear	[kN]	-1.67	-10.46	-18.34
	x	[m]	0.62	1.44	2.18
	Max Shear	[kN]	18.88	9.70	0.99
	x	[m]	0.00	0.74	1.56
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

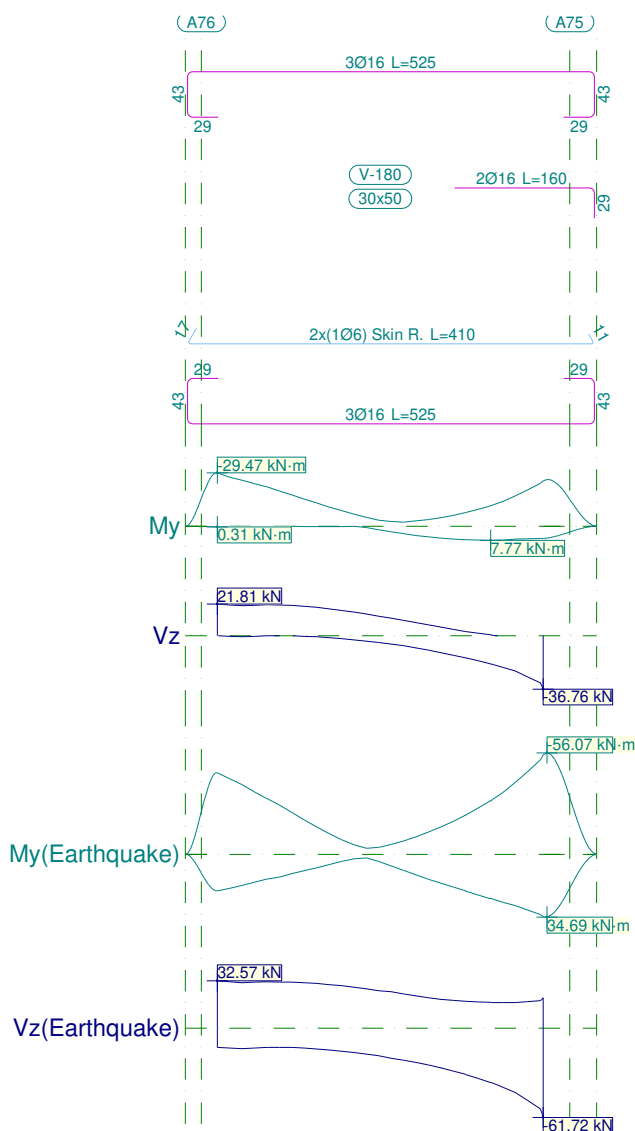


Beam reinforcement report

Frame 42				Span: V-179		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-22.23	-5.66	-22.28
		[m]		0.00	1.44	2.18
	Max Moment x	[kN·m]		16.64	10.60	15.52
		[m]		0.00	1.44	2.18
	Min Shear x	[kN]		-18.60	-20.72	-34.94
		[m]		0.00	1.44	2.18
	Max Shear x	[kN]		41.31	20.53	12.47
		[m]		0.00	0.74	2.02
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.03 mm, L/70655 (L: 2.18 m)		



1.43.- Frame 43



Frame 43			Span: V-180		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-29.47	-10.61	-25.04
	x	[m]	0.00	1.05	3.06
	Max Moment	[kN·m]	--	5.93	7.77
	x	[m]	--	1.98	2.57
	Min Shear	[kN]	-0.73	-10.00	-36.76
	x	[m]	0.23	1.98	3.06
	Max Shear	[kN]	21.81	18.60	5.97
	x	[m]	0.00	1.05	2.10
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	3.06
	x	[m]	--	--	3.03

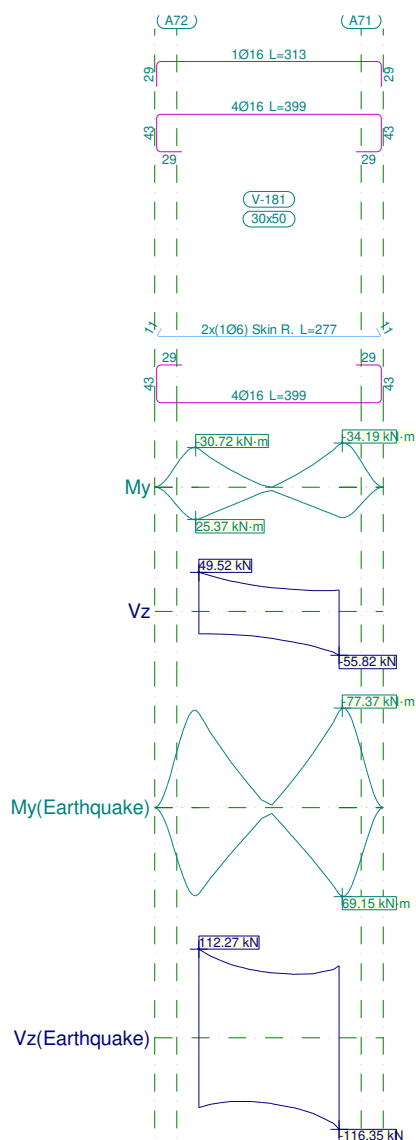


Beam reinforcement report

Frame 43				Span: V-180		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-45.10	-12.31	-54.98
		[m]		0.00	1.98	3.06
	Max Moment x	[kN·m]		20.19	13.78	34.55
		[m]		0.00	1.98	3.06
	Min Shear x	[kN]		-14.32	-25.55	-61.72
		[m]		0.93	1.98	3.06
	Max Shear x	[kN]		32.57	30.05	20.96
		[m]		0.00	1.05	3.06
	Min Torsion x	[kN]		--	--	-3.67
		[m]		--	--	3.03
Max Torsion x	[kN]		1.65	--	6.26	
	[m]		0.00	--	3.03	
Top Reinf. Area		[cm²]	Real	6.03	6.03	10.06
			Req.	4.56	4.56	6.44
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	5.18
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.07 mm, L/44973 (L: 3.06 m)		



1.44.- Frame 44



Frame 44			Span: V-181		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-29.63	-7.94	-32.95
	x	[m]	0.00	1.06	1.60
	Max Moment	[kN·m]	24.86	8.93	23.32
	x	[m]	0.00	1.06	1.60
	Min Shear	[kN]	-30.10	-38.54	-55.82
	x	[m]	0.48	1.06	1.60
	Max Shear	[kN]	49.52	33.76	27.54
	x	[m]	0.00	0.60	1.13
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	1.82
	x	[m]	--	--	1.53

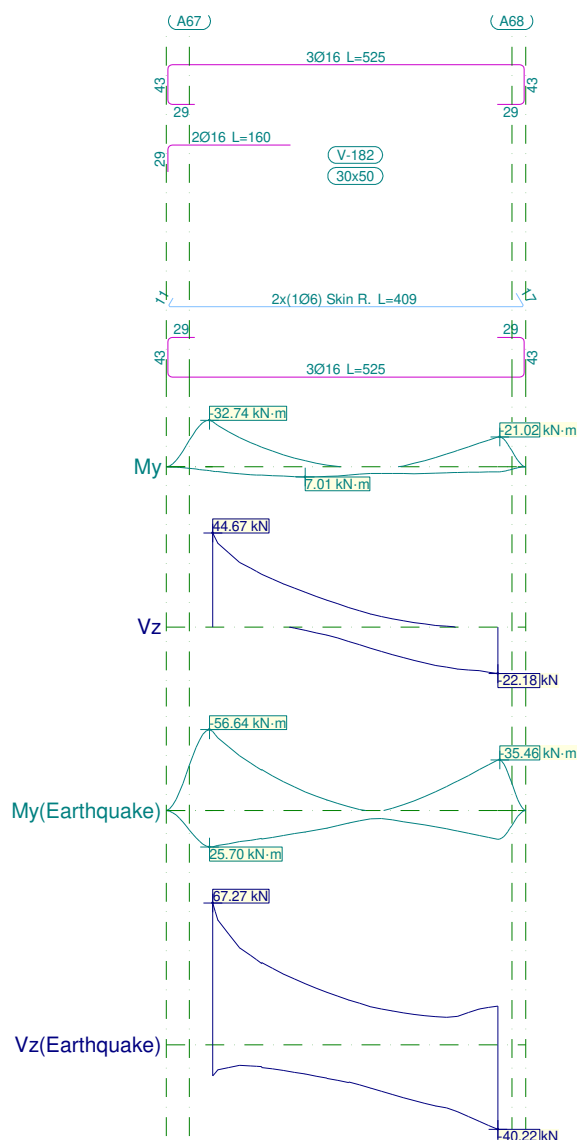


Beam reinforcement report

Frame 44				Span: V-181		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-73.48	-20.90	-74.88
		[m]		0.00	1.06	1.60
	Max Moment x	[kN·m]		66.98	22.36	67.33
		[m]		0.00	1.06	1.60
	Min Shear x	[kN]		-88.67	-88.71	-116.35
		[m]		0.00	1.06	1.60
	Max Shear x	[kN]		112.27	86.24	91.13
		[m]		0.00	0.60	1.60
	Min Torsion x	[kN]		-4.15	--	-4.59
		[m]		0.00	--	1.53
Max Torsion x	[kN]		3.54	--	5.67	
	[m]		0.00	--	1.53	
Top Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	7.62	4.66	7.71
Bot. Reinf. Area		[cm²]	Real	8.04	8.04	8.04
			Req.	7.09	5.03	7.11
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.60 m)		



1.45.- Frame 45



Frame 45			Span: V-182		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-31.83	-2.60	-20.92
	x	[m]	0.00	1.11	3.05
	Max Moment	[kN·m]	7.01	6.97	4.73
	x	[m]	0.99	1.11	2.16
	Min Shear	[kN]	-1.65	-13.15	-22.18
	x	[m]	0.99	1.92	3.05
	Max Shear	[kN]	44.67	14.57	2.95
	x	[m]	0.00	1.11	2.04
	Min Torsion	[kN]	-2.75	--	--
	x	[m]	0.00	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

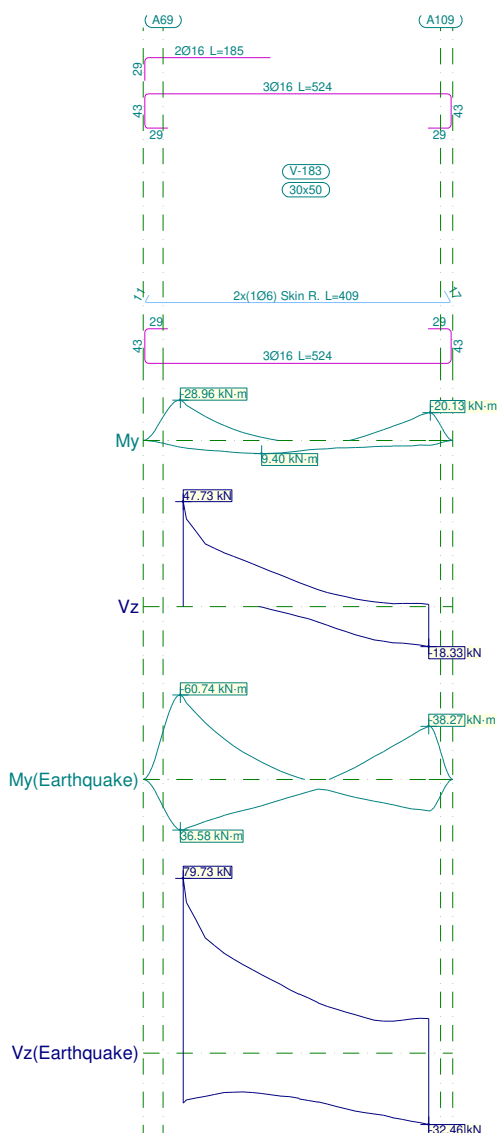


Beam reinforcement report

Frame 45				Span: V-182		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-55.38	-10.07	-35.36
		[m]		0.00	1.11	3.05
	Max Moment x	[kN·m]		25.62	13.78	20.19
		[m]		0.00	1.11	3.05
	Min Shear x	[kN]		-14.78	-23.64	-40.22
		[m]		0.00	1.92	3.05
	Max Shear x	[kN]		67.27	26.88	18.41
		[m]		0.00	1.11	3.05
	Min Torsion x	[kN]		-8.17	--	--
		[m]		0.06	--	--
Max Torsion x	[kN]		5.80	--	1.38	
	[m]		0.06	--	2.86	
Top Reinf. Area		[cm²]	Real	10.06	6.03	6.03
			Req.	6.48	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.03	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.03 mm, L/35567 (L: 1.17 m)		



1.46.- Frame 46



Frame 46			Span: V-183		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-27.90	--	-20.09
	x	[m]	0.00	--	3.05
	Max Moment	[kN·m]	9.40	9.27	5.08
	x	[m]	0.97	1.09	2.14
	Min Shear	[kN]	-0.26	-11.47	-18.33
	x	[m]	0.97	2.02	3.05
	Max Shear	[kN]	47.73	16.06	3.48
	x	[m]	0.00	1.09	2.14
	Min Torsion	[kN]	--	--	-1.59
	x	[m]	--	--	2.84
	Max Torsion	[kN]	12.51	--	--
	x	[m]	0.00	--	--

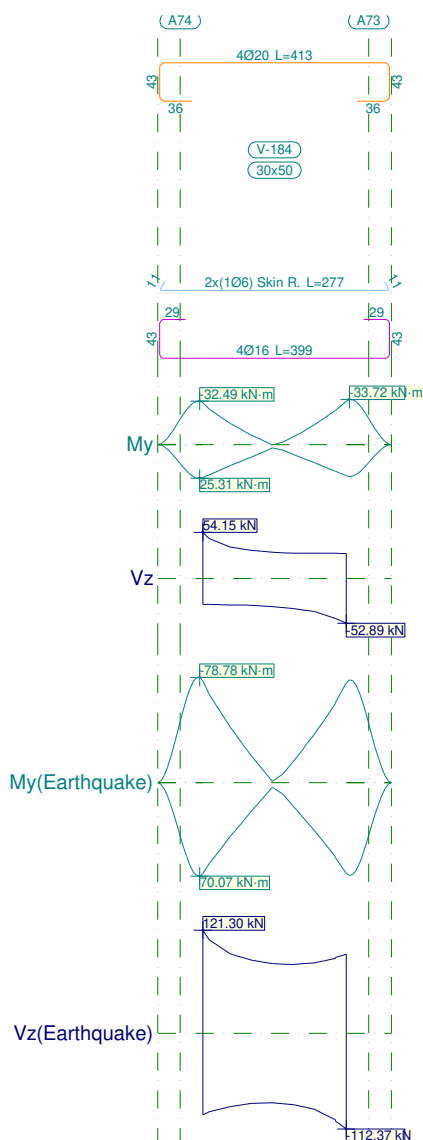


Beam reinforcement report

Frame 46				Span: V-183		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-59.15	-9.08	-38.27
		[m]		0.00	1.09	3.05
	Max Moment x	[kN·m]		36.42	17.03	22.81
		[m]		0.00	1.09	3.05
	Min Shear x	[kN]		-22.64	-25.34	-32.46
		[m]		0.00	2.02	3.05
	Max Shear x	[kN]		79.73	33.62	17.51
		[m]		0.00	1.09	2.14
	Min Torsion x	[kN]		--	--	-2.60
		[m]		--	--	2.84
Max Torsion x	[kN]		12.96	--	--	
	[m]		0.00	--	--	
Top Reinf. Area		[cm²]	Real	10.06	6.03	6.03
			Req.	6.72	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.29	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	4.35	2.46	2.46
			Req.	4.05	2.45	2.45
Active Defl.				0.05 mm, L/37807 (L: 1.98 m)		



1.47.- Frame 47



Frame 47			Span: V-184		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-31.28	-7.19	-32.57
	x	[m]	0.00	0.54	1.60
	Max Moment	[kN·m]	24.74	9.37	23.43
	x	[m]	0.00	0.54	1.60
	Min Shear	[kN]	-31.35	-35.50	-52.89
	x	[m]	0.47	1.01	1.60
	Max Shear	[kN]	54.15	33.20	29.57
	x	[m]	0.00	0.54	1.12
	Min Torsion	[kN]	--	--	-8.81
	x	[m]	--	--	1.47
	Max Torsion	[kN]	11.61	1.54	--
	x	[m]	0.00	0.54	--

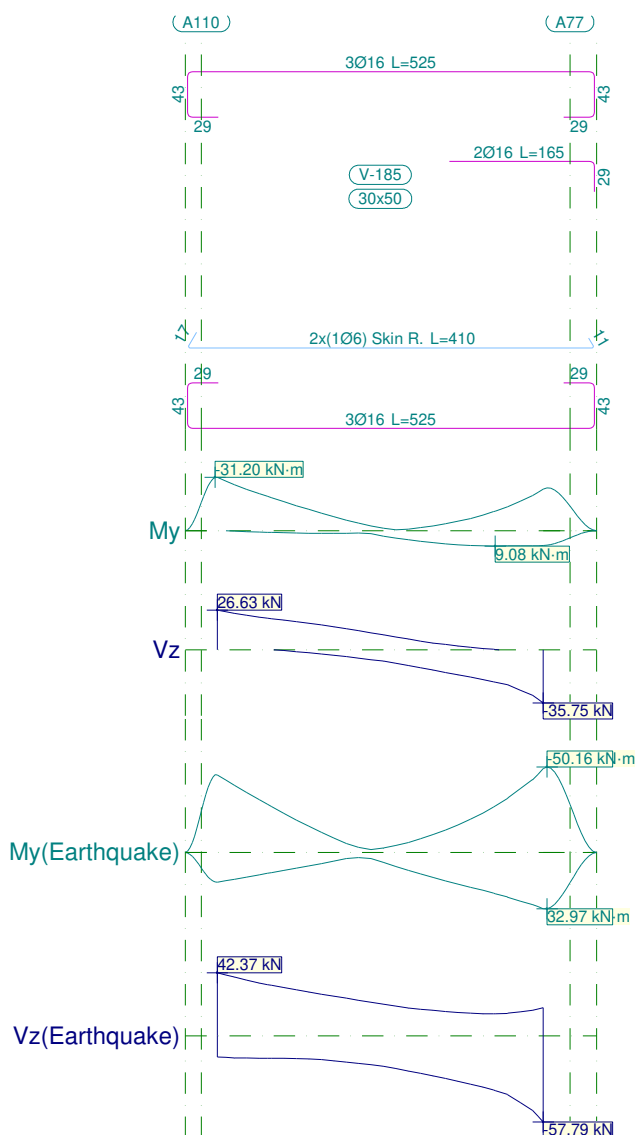


Beam reinforcement report

Frame 47				Span: V-184		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-76.16	-20.23	-74.65
		[m]		0.00	0.54	1.60
	Max Moment x	[kN·m]		68.12	21.61	67.83
		[m]		0.00	0.54	1.60
	Min Shear x	[kN]		-95.97	-83.92	-112.37
		[m]		0.00	1.01	1.60
	Max Shear x	[kN]		121.30	86.03	92.76
		[m]		0.00	0.54	1.60
	Min Torsion x	[kN]		--	-1.46	-10.02
		[m]		--	1.01	1.60
Max Torsion x	[kN]		11.13	1.80	--	
	[m]		0.00	0.54	--	
Top Reinf. Area		[cm²]	Real	12.57	12.57	12.57
			Req.	7.82	4.64	7.71
Bot. Reinf. Area		[cm²]	Real	8.04	8.04	8.04
			Req.	7.16	6.28	7.14
Transv. Reinf. Area		[cm²/m]	Real	5.66	5.66	5.66
			Req.	4.94	2.45	3.52
Active Defl.				0.03 mm, L/116061 (L: 3.19 m)		



1.48.- Frame 48



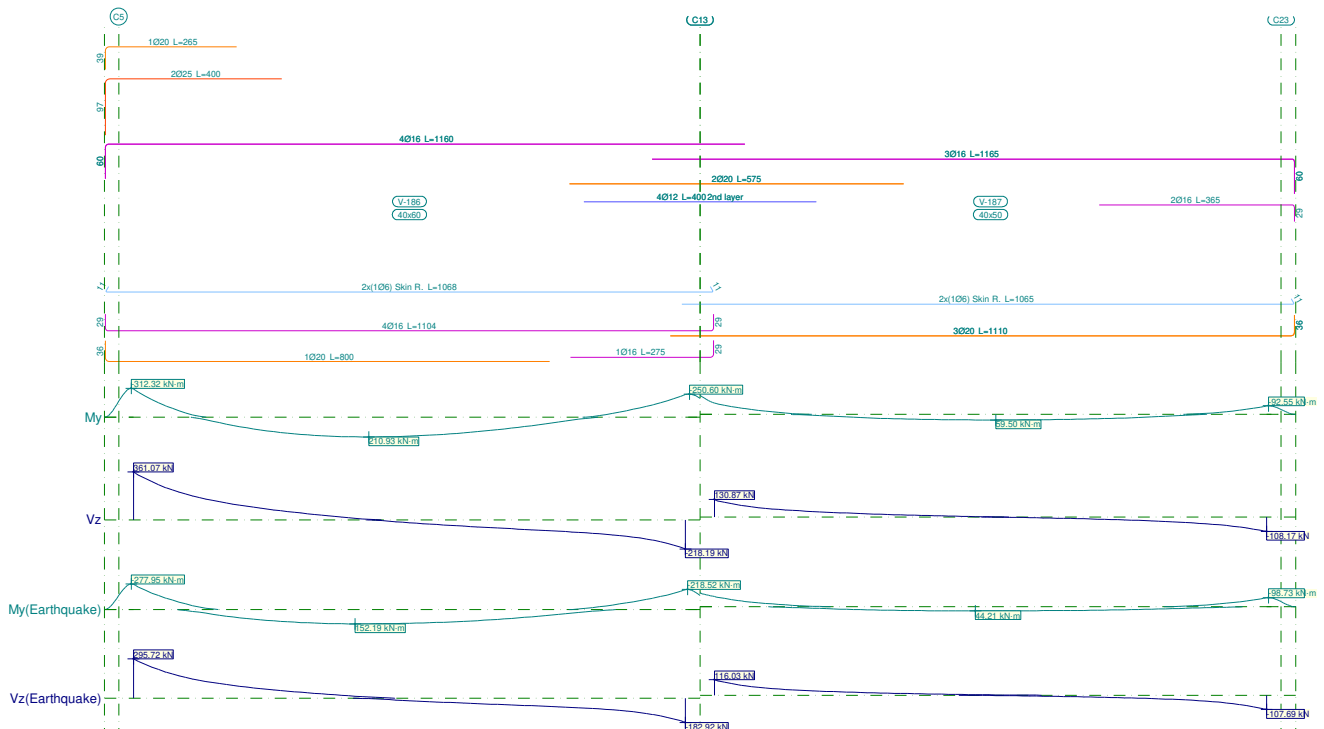
Frame 48			Span: V-185		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-31.16	-8.12	-24.31
	x	[m]	0.00	1.09	3.06
	Max Moment	[kN·m]	1.61	7.11	9.08
	x	[m]	0.98	2.03	2.61
	Min Shear	[kN]	-2.87	-13.67	-35.75
	x	[m]	0.98	2.03	3.06
	Max Shear	[kN]	26.63	15.40	3.48
	x	[m]	0.00	1.09	2.14
	Min Torsion	[kN]	--	--	-6.67
	x	[m]	--	--	2.96
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--



Beam reinforcement report

Frame 48				Span: V-185		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-45.51	-10.49	-49.10
		[m]		0.00	2.03	3.06
	Max Moment x	[kN·m]		17.31	14.66	32.87
		[m]		0.00	2.03	3.06
	Min Shear x	[kN]		-15.96	-26.87	-57.79
		[m]		0.98	2.03	3.06
	Max Shear x	[kN]		42.37	26.68	18.94
		[m]		0.00	1.09	3.06
	Min Torsion x	[kN]		--	--	-9.17
		[m]		--	--	2.96
Max Torsion x	[kN]		1.39	1.41	1.91	
	[m]		0.98	1.09	2.96	
Top Reinf. Area		[cm²]	Real	6.03	6.03	10.06
			Req.	4.56	4.56	6.09
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	5.08
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	3.33
			Req.	2.45	2.45	2.62
Active Defl.				0.06 mm, L/54627 (L: 3.06 m)		

1.49.- Frame 49



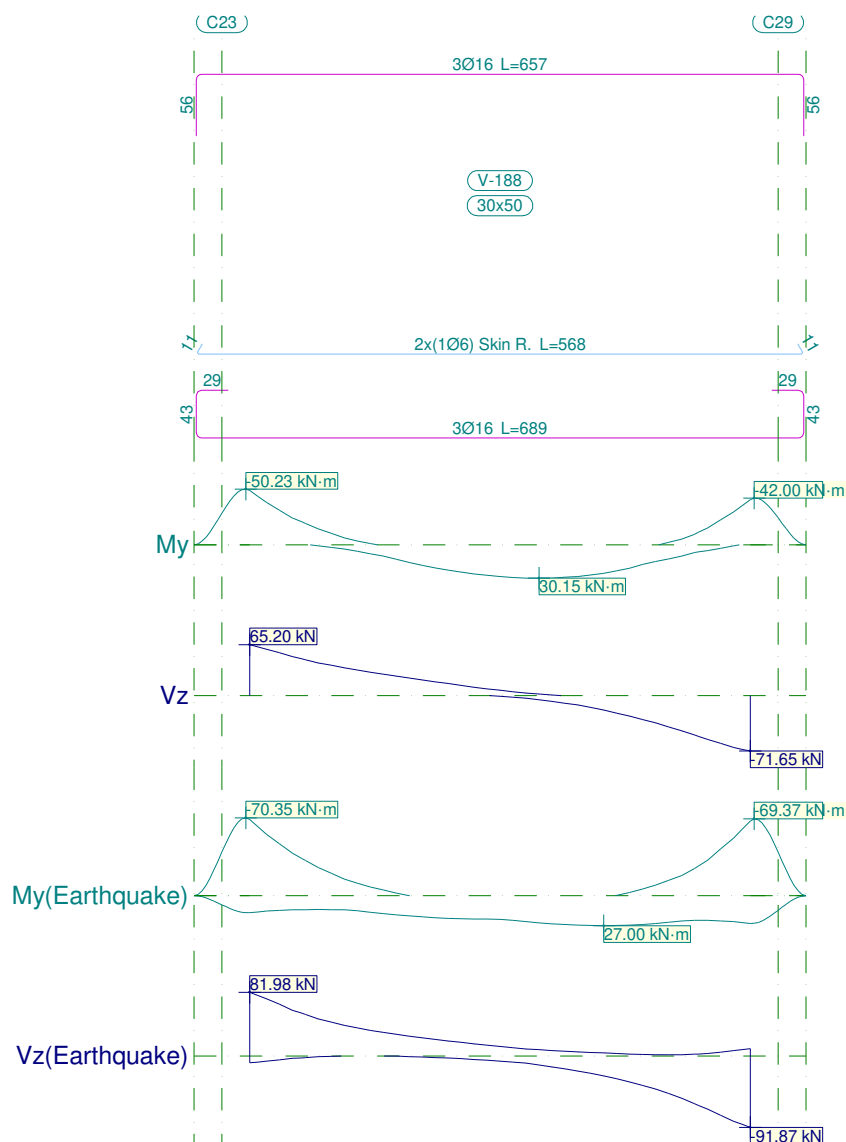


Beam reinforcement report

Frame 49				Span: V-186			Span: V-187		
Section				40x60			40x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment. x	[kN·m]		-305.66	--	-244.80	-122.25	--	-90.54
		[m]		0.00	--	9.50	0.00	--	9.50
	Max Moment x	[kN·m]		193.32	210.93	124.68	46.39	59.50	50.03
		[m]		3.12	4.05	6.38	3.09	4.84	6.36
	Min Shear x	[kN]		--	-60.83	-218.19	--	-12.29	-108.17
		[m]		--	6.27	9.50	--	6.24	9.50
	Max Shear x	[kN]		361.07	36.02	--	130.87	16.12	--
		[m]		0.00	3.23	--	0.00	3.21	--
	Min Torsion x	[kN]		-3.88	-2.08	--	--	--	--
		[m]		0.00	3.23	--	--	--	--
Max Torsion x	[kN]		--	--	6.12	3.25	--	--	
	[m]		--	--	9.42	0.00	--	--	
Seismic situations	Min Moment. x	[kN·m]		-272.82	--	-215.07	-110.30	--	-96.84
		[m]		0.00	--	9.50	0.00	--	9.50
	Max Moment x	[kN·m]		144.02	152.19	98.76	37.54	44.21	38.36
		[m]		3.12	3.82	6.38	3.09	4.49	6.36
	Min Shear x	[kN]		--	-47.50	-182.92	--	-11.56	-107.69
		[m]		--	6.27	9.50	--	6.24	9.50
	Max Shear x	[kN]		295.72	32.09	--	116.03	13.40	--
		[m]		0.00	3.23	--	0.00	3.21	--
	Min Torsion x	[kN]		-6.83	-1.79	-2.84	-4.08	--	-3.42
		[m]		0.00	3.23	9.42	0.00	--	9.39
Max Torsion x	[kN]		2.59	--	9.68	7.60	--	3.21	
	[m]		0.00	--	9.42	0.00	--	9.39	
Top Reinf. Area		[cm²]	Real	21.00	8.04	23.41	22.39	6.34	10.06
			Req.	18.98	6.22	17.67	13.45	6.22	6.22
Bot. Reinf. Area		[cm²]	Real	11.19	11.19	11.19	9.43	9.43	9.43
			Req.	10.50	10.27	11.71	11.20	6.05	6.05
Transv. Reinf. Area		[cm²/m]	Real	13.31	3.33	6.29	3.33	3.33	3.33
			Req.	12.09	3.26	5.43	3.26	3.26	3.26
Active Defl.				9.66 mm, L/984 (L: 9.50 m)			2.58 mm, L/3545 (L: 9.15 m)		



1.50.- Frame 50



Frame 50			Span: V-188		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-48.93	--	-40.59
	x	[m]	0.00	--	4.50
	Max Moment	[kN·m]	15.88	30.15	27.27
	x	[m]	1.43	2.60	3.07
	Min Shear	[kN]	--	-12.30	-71.65
	x	[m]	--	2.95	4.50
	Max Shear	[kN]	65.20	20.03	--
	x	[m]	0.00	1.55	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

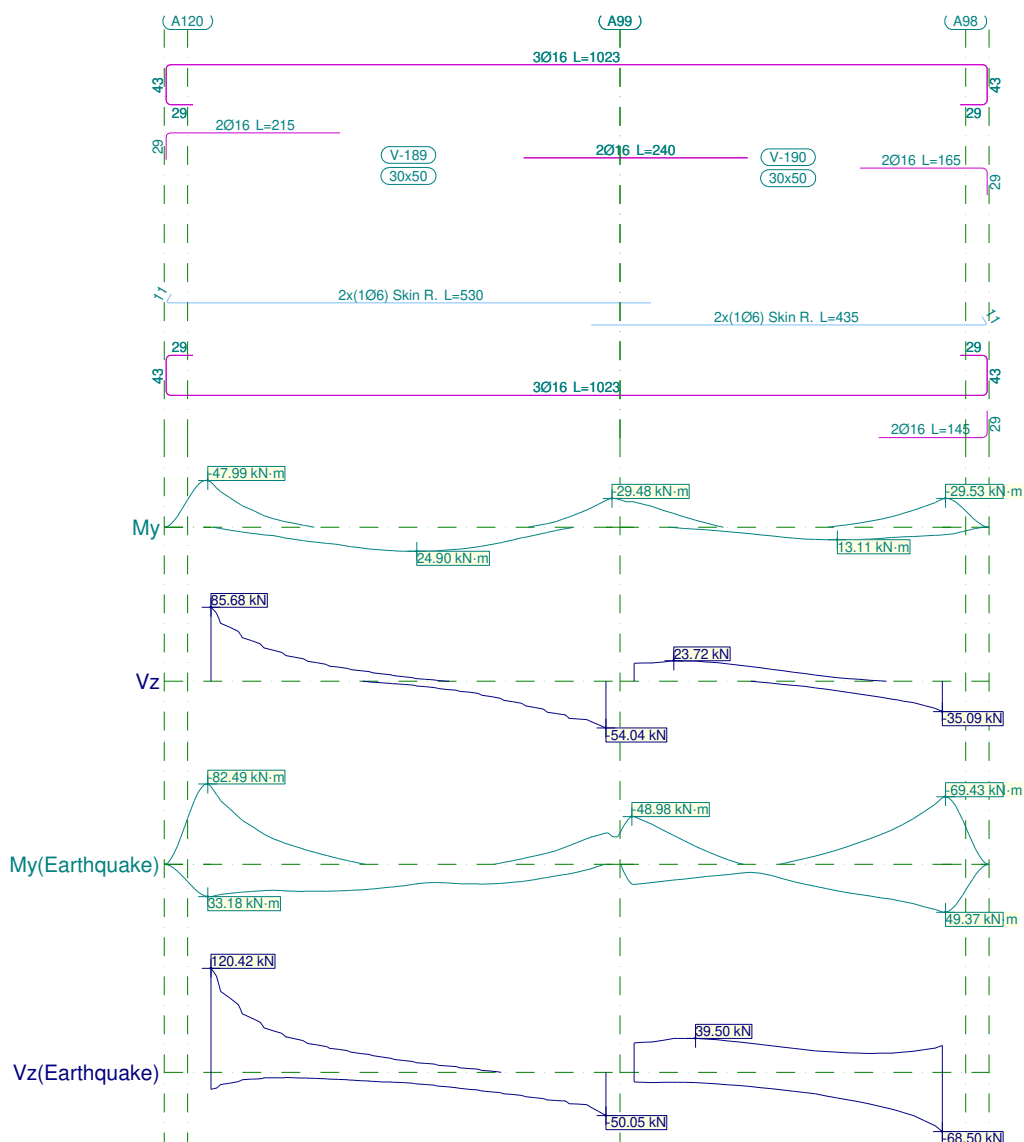


Beam reinforcement report

Frame 50				Span: V-188		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-68.83	--	-67.53
	x	[m]		0.00	--	4.50
	Max Moment	[kN·m]		18.18	26.65	27.00
	x	[m]		1.43	2.95	3.18
	Min Shear	[kN]		-8.71	-19.22	-91.87
	x	[m]		0.00	2.95	4.50
	Max Shear	[kN]		81.98	23.36	9.55
	x	[m]		0.00	1.55	4.50
	Min Torsion	[kN]		--	--	-1.95
	x	[m]		--	--	4.35
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.66	4.56	4.66
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.37 mm, L/11822 (L: 4.32 m)		



1.51.- Frame 51



Frame 51			Span: V-189			Span: V-190		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-46.13	--	-27.66	-26.01	--	-28.87
	x	[m]	0.00	--	4.23	0.00	--	3.30
	Max Moment	[kN·m]	18.00	24.90	20.19	4.67	13.11	13.00
	x	[m]	1.36	2.20	2.86	1.01	2.18	2.29
	Min Shear	[kN]	--	-12.55	-54.04	--	-11.01	-35.09
	x	[m]	--	2.76	4.23	--	2.18	3.30
	Max Shear	[kN]	85.68	15.18	--	23.72	18.78	3.32
	x	[m]	0.00	1.46	--	0.43	1.13	2.29
	Min Torsion	[kN]	-5.85	--	--	-5.85	--	--
	x	[m]	0.00	--	--	0.00	--	--
	Max Torsion	[kN]	2.25	2.72	6.01	--	--	4.36
	x	[m]	0.29	2.63	4.03	--	--	3.23

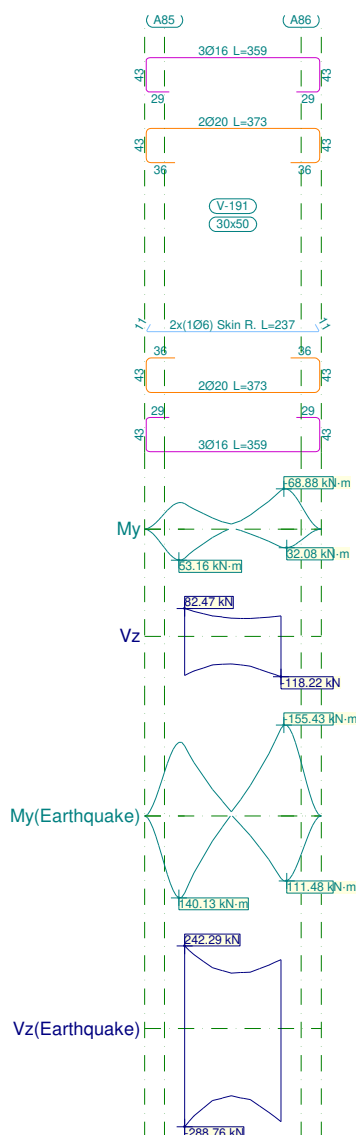


Beam reinforcement report

Frame 51				Span: V-189			Span: V-190		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-79.96	-3.95	-32.13	-48.90	-14.98	-68.32
		[m]		0.00	1.46	4.23	0.00	2.18	3.30
	Max Moment x	[kN·m]		33.07	26.99	20.26	20.76	27.17	49.13
		[m]		0.00	1.46	2.90	0.00	2.18	3.30
	Min Shear x	[kN]		-19.40	-19.43	-50.05	-14.20	-29.48	-68.50
		[m]		0.00	2.76	4.23	1.01	2.18	3.30
	Max Shear x	[kN]		120.42	25.20	3.71	39.50	35.21	31.26
		[m]		0.00	1.46	2.86	0.66	1.13	3.30
	Min Torsion x	[kN]		-7.84	--	--	-5.80	--	--
		[m]		0.00	--	--	0.00	--	--
Max Torsion x	[kN]		3.59	3.07	6.01	--	--	5.81	
	[m]		0.06	2.63	4.03	--	--	3.23	
Top Reinf. Area		[cm²]	Real	10.06	6.03	10.06	10.06	6.52	10.06
			Req.	8.02	4.56	5.05	6.02	4.56	7.23
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	10.06
			Req.	5.09	4.56	5.03	5.03	4.56	6.03
Transv. Reinf. Area		[cm²/m]	Real	3.54	3.33	3.33	3.33	3.33	3.33
			Req.	3.17	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.29 mm, L/14475 (L: 4.23 m)			0.09 mm, L/29689 (L: 2.53 m)		



1.52.- Frame 52



Frame 52			Span: V-191		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-43.62	-17.11	-66.21
	x	[m]	0.00	0.73	1.20
	Max Moment	[kN·m]	49.91	5.66	30.59
	x	[m]	0.00	0.46	1.20
	Min Shear	[kN]	-114.67	-84.53	-118.22
	x	[m]	0.00	0.73	1.20
	Max Shear	[kN]	82.47	57.45	60.69
	x	[m]	0.00	0.46	1.20
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

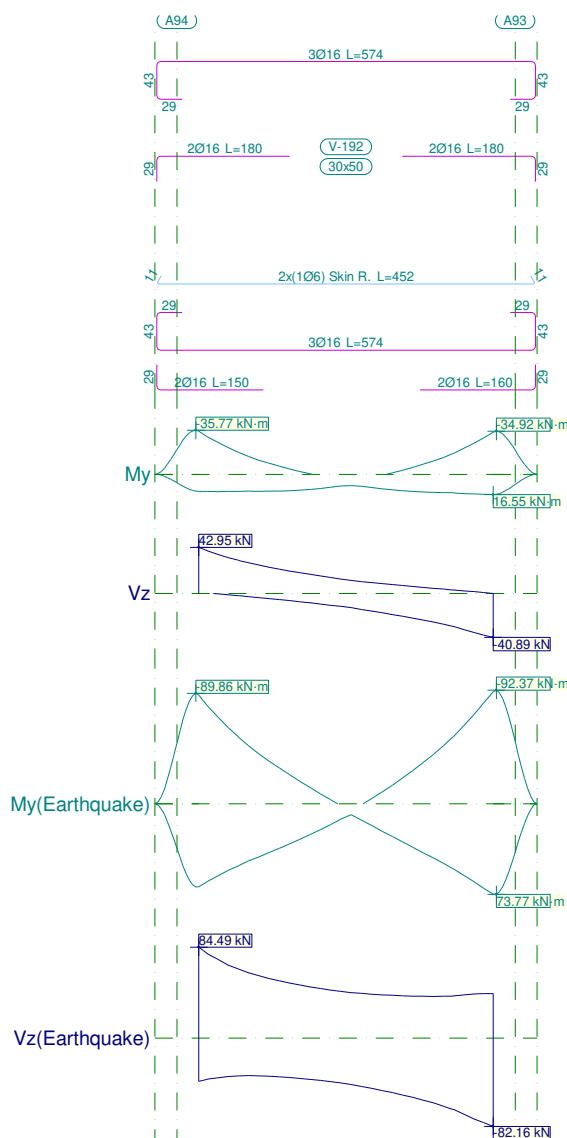


Beam reinforcement report

Frame 52				Span: V-191		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-120.02	-34.60	-149.20
		[m]		0.00	0.73	1.20
	Max Moment x	[kN·m]		132.31	20.40	106.80
		[m]		0.00	0.73	1.20
	Min Shear x	[kN]		-288.76	-205.13	-273.04
		[m]		0.00	0.73	1.20
	Max Shear x	[kN]		242.29	170.71	202.07
		[m]		0.00	0.46	1.20
	Min Torsion x	[kN]		-3.29	--	-1.71
		[m]		0.00	--	1.05
Max Torsion x	[kN]		3.20	--	--	
	[m]		0.00	--	--	
Top Reinf. Area		[cm²]	Real	12.32	12.32	12.32
			Req.	10.74	9.03	9.43
Bot. Reinf. Area		[cm²]	Real	12.32	12.32	12.32
			Req.	11.14	7.95	6.35
Transv. Reinf. Area		[cm²/m]	Real	12.58	12.58	12.58
			Req.	10.78	3.84	10.01
Active Defl.				0.11 mm, L/20946 (L: 2.39 m)		



1.53.- Frame 53



Frame 53			Span: V-192		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-34.96	-2.28	-34.16
	x	[m]	0.00	1.15	3.35
	Max Moment	[kN·m]	14.10	12.94	16.55
	x	[m]	0.22	1.15	3.35
	Min Shear	[kN]	-6.64	-19.47	-40.89
	x	[m]	1.03	2.20	3.35
	Max Shear	[kN]	42.95	19.40	7.53
	x	[m]	0.00	1.15	2.32
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	1.59
	x	[m]	--	--	3.13

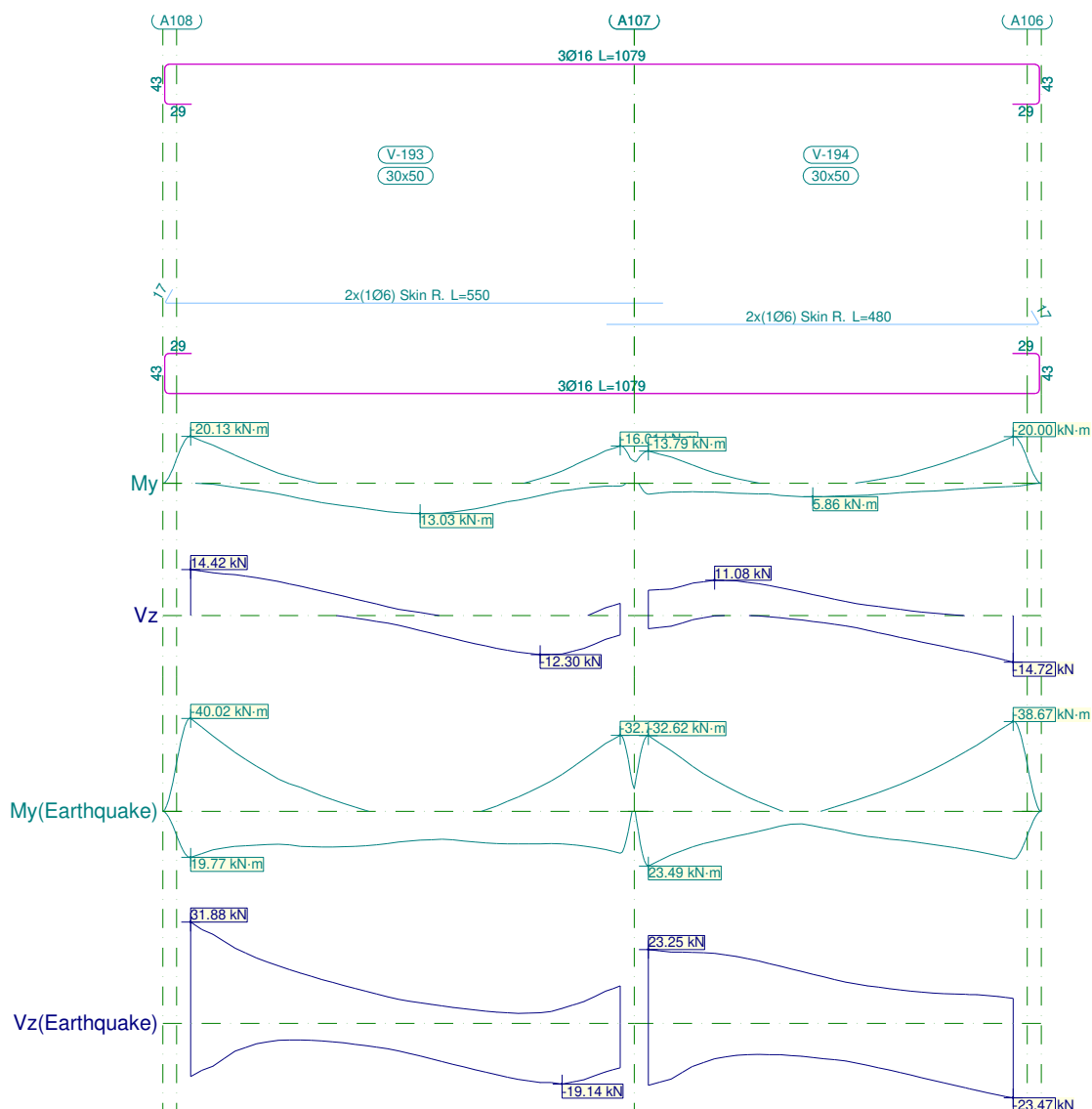


Beam reinforcement report

Frame 53				Span: V-192		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-88.55	-18.31	-91.17
		[m]		0.00	1.15	3.35
	Max Moment x	[kN·m]		67.57	28.98	73.57
		[m]		0.00	1.15	3.35
	Min Shear x	[kN]		-40.37	-50.77	-82.16
		[m]		0.00	2.20	3.35
	Max Shear x	[kN]		84.49	49.30	41.38
		[m]		0.00	1.15	3.35
	Min Torsion x	[kN]		-3.74	--	-2.53
		[m]		0.00	--	3.13
Max Torsion x	[kN]		2.50	--	3.54	
	[m]		0.00	--	3.13	
Top Reinf. Area		[cm²]	Real	10.06	6.03	10.06
			Req.	8.46	4.56	8.61
Bot. Reinf. Area		[cm²]	Real	10.06	6.03	10.06
			Req.	7.12	4.56	7.48
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.09 mm, L/35379 (L: 3.35 m)		



1.54.- Frame 54



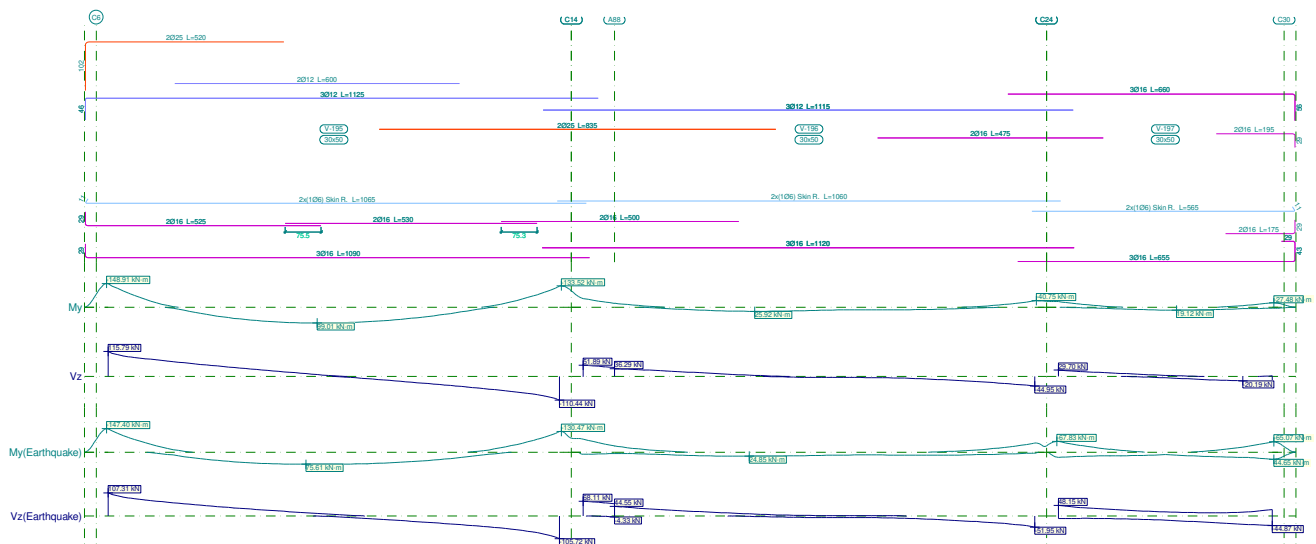
Frame 54			Span: V-193			Span: V-194		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-20.13	--	-16.01	-13.79	-2.36	-20.00
	x	[m]	0.00	--	4.59	0.00	2.58	3.90
	Max Moment	[kN·m]	9.06	13.03	10.13	4.67	5.86	4.08
	x	[m]	1.52	2.45	3.15	0.00	1.76	2.69
	Min Shear	[kN]	--	-8.87	-12.30	-4.20	-6.16	-14.72
	x	[m]	--	3.04	3.74	0.00	2.58	3.90
	Max Shear	[kN]	14.42	6.04	3.85	11.08	8.77	1.89
	x	[m]	0.00	1.64	4.59	0.71	1.41	2.69
	Min Torsion	[kN]	--	--	-6.27	--	--	--
	x	[m]	--	--	4.44	--	--	--
	Max Torsion	[kN]	1.59	--	--	4.43	--	--
	x	[m]	0.00	--	--	0.00	--	--



Beam reinforcement report

Frame 54				Span: V-193			Span: V-194		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-40.02	-3.33	-32.75	-32.62	-9.82	-38.67
	x	[m]		0.00	1.64	4.59	0.00	2.58	3.90
	Max Moment	[kN·m]		19.77	15.28	18.02	23.49	11.94	20.44
	x	[m]		0.00	1.64	4.59	0.00	2.58	3.90
	Min Shear	[kN]		-16.79	-14.60	-19.14	-19.47	-14.74	-23.47
	x	[m]		0.00	3.04	3.97	0.00	2.58	3.90
	Max Shear	[kN]		31.88	11.90	11.75	23.25	17.99	10.51
	x	[m]		0.00	1.64	4.59	0.00	1.41	2.69
	Min Torsion	[kN]		--	--	-6.79	--	--	-2.77
	x	[m]		--	--	4.44	--	--	3.74
	Max Torsion	[kN]		1.81	--	--	4.97	--	1.40
	x	[m]		0.00	--	--	0.00	--	3.74
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	5.08	5.07	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	4.56	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.17 mm, L/27460 (L: 4.59 m)			0.03 mm, L/42986 (L: 1.44 m)		

1.55.- Frame 55





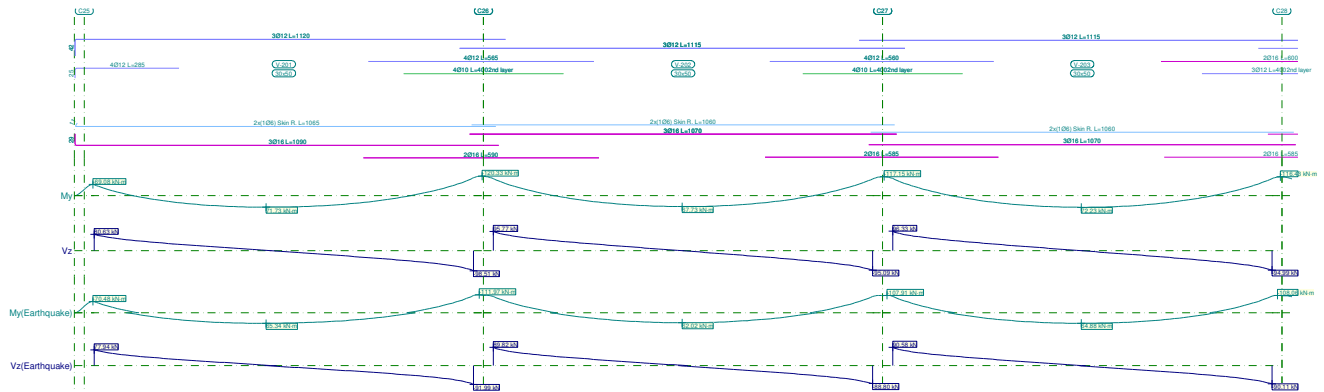
Beam reinforcement report

Frame 55				Span: V-195			Span: V-196			Span: V-197		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-147.4	--	-131.2	-53.8	--	-39.8	-34.6	--	-27.3
		x	[m]	0.00	--	9.50	0.00	--	9.50	0.00	--	4.50
	Max Moment	[kN·m]	83.64	99.0	69.56	24.5	25.9	16.0	11.7	19.1	16.0	
		x	[m]	3.12	4.40	6.38	3.14	3.61	6.53	1.43	2.48	3.07
	Min Shear	[kN]	--	-24.8	-110.4	--	-5.9	-44.9	-0.69	-13.4	-20.1	
		x	[m]	--	6.27	9.50	--	6.29	9.50	1.43	2.95	3.88
	Max Shear	[kN]	115.7	30.0	--	51.8	8.19	--	29.7	11.5	2.44	
		x	[m]	0.00	3.23	--	0.00	3.26	--	0.00	1.55	4.50
	Min Torsion	[kN]	-19.24	--	--	--	--	--	-2.52	-1.40	--	
		x	[m]	0.00	--	--	--	--	--	0.00	1.55	--
	Max Torsion	[kN]	1.59	1.64	8.09	1.46	--	--	--	--	5.51	
		x	[m]	3.12	3.58	9.42	0.00	--	--	--	--	4.35
Seismic situations	Min Moment.	[kN·m]		-146.2	--	-129.0	-81.3	--	-57.9	-67.2	-5.97	-64.6
		x	[m]	0.00	--	9.50	0.00	--	9.50	0.00	1.55	4.50
	Max Moment	[kN·m]	68.26	75.6	59.15	24.3	24.8	19.1	32.3	24.6	44.4	
		x	[m]	3.12	4.17	6.38	3.14	3.49	7.23	0.00	2.95	4.50
	Min Shear	[kN]	--	-23.5	-105.7	-4.33	-8.7	-51.9	-14.1	-27.8	-44.8	
		x	[m]	--	6.27	9.50	0.66	6.29	9.50	1.43	2.95	4.50
	Max Shear	[kN]	107.3	28.2	--	68.1	11.6	1.03	48.1	24.8	29.3	
		x	[m]	0.00	3.23	--	0.00	3.26	6.41	0.00	1.55	4.50
	Min Torsion	[kN]	-16.40	--	--	-2.48	--	-2.61	-3.82	-1.50	--	
		x	[m]	0.00	--	--	0.20	--	9.44	0.00	1.55	--
	Max Torsion	[kN]	1.43	1.45	7.07	3.98	--	2.72	--	--	5.33	
		x	[m]	3.12	3.58	9.42	0.20	--	9.44	--	--	4.50
Top Reinf. Area		[cm²]	Real	15.47	9.41	15.25	15.0	8.70	11.8	11.8	6.03	10.0
			Req.	12.24	5.03	11.24	8.40	3.36	4.86	7.17	4.56	6.98
Bot. Reinf. Area		[cm²]	Real	10.06	10.0	13.88	11.4	6.13	9.72	9.49	6.03	10.0
			Req.	7.74	5.83	7.63	7.54	4.56	5.95	5.94	4.56	5.76
Transv. Reinf. Area		[cm²/m]	Real	9.15	2.46	4.72	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	8.27	2.45	4.10	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				8.93 mm, L/1064 (L: 9.50 m)			1.18 mm, L/7747 (L: 9.13 m)			0.26 mm, L/17025 (L: 4.35 m)		



2.- TECHO

2.1.- Frame 1

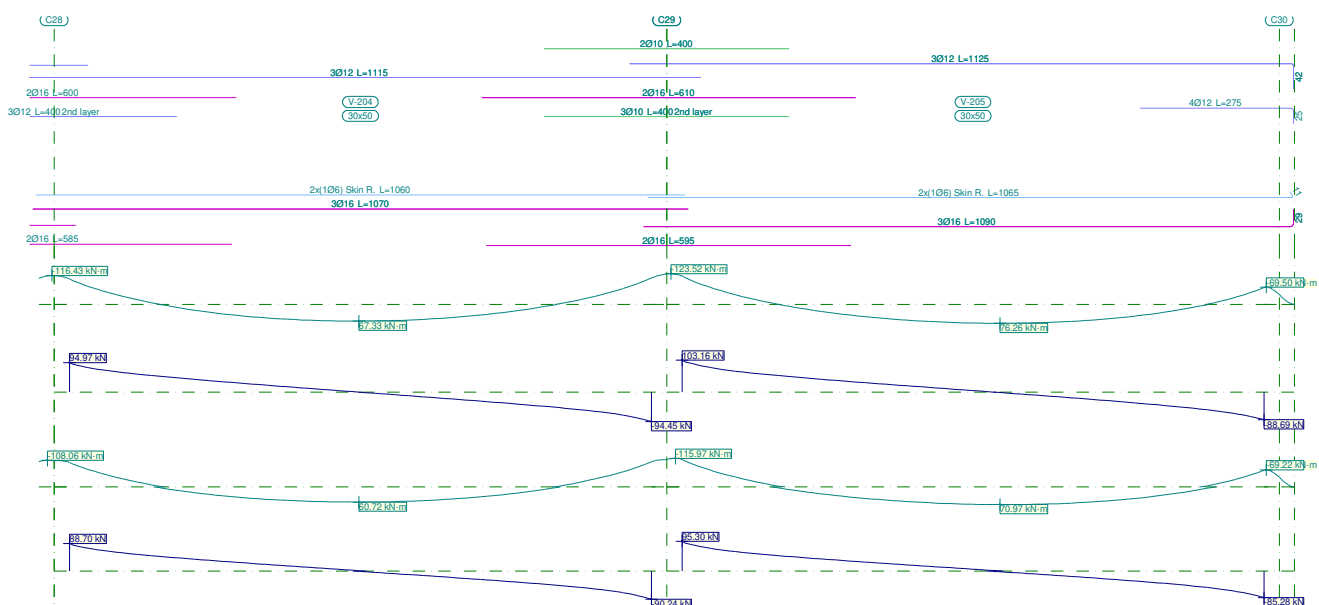


Frame 1			Span: V-201			Span: V-202			Span: V-203		
Section			30x50			30x50			30x50		
Zone			1/3 L	2/3 L	3/3L	1/3L	2/3 L	3/3L	1/3L	2/3 L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-67.59	--	-110.48	-105.22	--	-104.06	-106.30	--	-105.87
		[m]	0.00	--	9.50	0.00	--	9.50	0.00	--	9.50
	Max Moment	[kN·m]	63.83	71.73	50.19	50.84	67.73	53.13	55.07	72.23	56.09
		[m]	3.14	4.31	6.41	3.09	4.73	6.36	3.09	4.73	6.36
	Min Shear	[kN]	--	-25.39	-98.51	--	-22.13	-95.09	--	-22.22	-94.99
		[m]	--	6.29	9.50	--	6.24	9.50	--	6.24	9.50
	Max Shear	[kN]	80.63	15.72	--	95.77	22.71	--	96.33	22.83	--
		[m]	0.00	3.26	--	0.00	3.21	--	0.00	3.21	--
	Min Torsion	[kN]	--	--	-3.64	--	--	-2.58	--	--	-3.41
		[m]	--	--	9.44	--	--	9.39	--	--	9.39
Seismic situations	Min Moment.	[kN·m]	-69.09	--	-106.64	-100.64	--	-100.84	-102.16	--	-102.29
		[m]	0.00	--	9.50	0.00	--	9.50	0.00	--	9.50
	Max Moment	[kN·m]	59.62	65.34	46.27	46.82	62.02	48.33	50.48	64.88	51.39
		[m]	3.14	4.31	6.41	3.09	4.73	6.36	3.09	4.73	6.36
	Min Shear	[kN]	--	-24.06	-91.99	--	-21.10	-88.80	--	-20.96	-90.11
		[m]	--	6.29	9.50	--	6.24	9.50	--	6.24	9.50
	Max Shear	[kN]	77.94	15.49	--	89.82	21.47	--	90.58	21.44	--
		[m]	0.00	3.26	--	0.00	3.21	--	0.00	3.21	--
	Min Torsion	[kN]	--	--	-3.77	--	--	-3.03	--	--	-3.39
		[m]	--	--	9.44	--	--	9.50	--	--	9.39
	Max Torsion	[kN]	3.26	--	--	3.43	--	--	4.12	--	--
		[m]	0.00	--	--	0.00	--	--	0.00	--	--



Beam reinforcement report

Frame 1			Span: V-201			Span: V-202			Span: V-203		
Section			30x50			30x50			30x50		
Zone			1/3 L	2/3 L	3/3L	1/3L	2/3 L	3/3L	1/3L	2/3 L	3/3L
Top Reinf. Area	[cm²]	Real	7.92	3.39	13.10	12.87	3.39	13.10	12.89	3.39	12.85
		Req.	7.28	3.61	10.48	10.46	3.61	9.66	10.28	3.61	10.28
Bot. Reinf. Area	[cm²]	Real	6.03	6.03	11.10	11.43	6.03	11.10	11.10	6.03	11.10
		Req.	4.66	4.66	6.55	6.43	4.66	6.55	6.44	4.66	6.42
Transv. Reinf. Area	[cm²/m]	Real	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
		Req.	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.			7.06 mm, L/1345 (L: 9.50 m)			5.54 mm, L/1714 (L: 9.50 m)			6.28 mm, L/1514 (L: 9.50 m)		



Frame 1			Span: V-204			Span: V-205		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-103.15	--	-106.61	-114.26	--	-67.78
		[m]	0.00	--	9.50	0.00	--	9.50
	Max Moment	[kN·m]	52.23	67.33	50.77	52.18	76.26	68.47
		[m]	3.09	4.73	6.36	3.09	5.19	6.36
	Min Shear	[kN]	--	-21.92	-94.45	--	-16.44	-88.69
		[m]	--	6.24	9.50	--	6.24	9.50
	Max Shear	[kN]	94.97	22.57	--	103.16	27.25	--
		[m]	0.00	3.21	--	0.00	3.21	--
	Min Torsion	[kN]	--	--	-2.73	-1.61	--	-2.69
		[m]	--	--	9.39	1.69	--	9.39
	Max Torsion	[kN]	3.20	--	--	2.93	--	1.48
		[m]	0.00	--	--	0.00	--	7.76

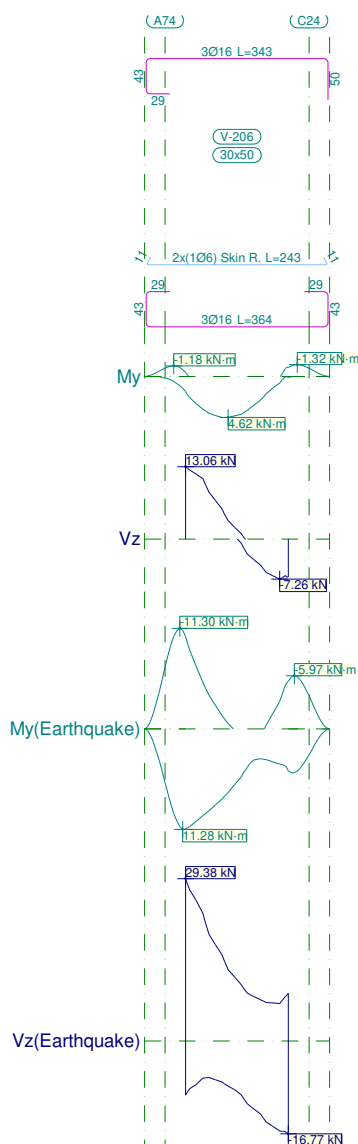


Beam reinforcement report

Frame 1				Span: V-204			Span: V-205		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-99.28	--	-101.88	-110.83	--	-67.60
		[m]		0.00	--	9.50	0.00	--	9.50
	Max Moment x	[kN·m]		47.50	60.72	46.37	47.81	70.97	64.75
		[m]		3.09	4.73	6.36	3.09	5.19	6.36
	Min Shear x	[kN]		--	-20.74	-90.24	--	-15.90	-85.28
		[m]		--	6.24	9.50	--	6.24	9.50
	Max Shear x	[kN]		88.70	21.36	--	95.30	25.95	--
		[m]		0.00	3.21	--	0.00	3.21	--
	Min Torsion x	[kN]		--	--	-2.86	-1.54	--	-3.05
		[m]		--	--	9.39	1.69	--	9.39
Max Torsion x	[kN]		3.69	--	--	3.64	--	1.51	
	[m]		0.00	--	--	0.00	--	7.76	
Top Reinf. Area		[cm²]	Real	12.64	3.39	13.45	13.17	3.39	7.92
			Req.	10.27	3.68	9.87	10.66	3.68	7.20
Bot. Reinf. Area		[cm²]	Real	11.10	6.03	11.43	11.10	6.03	6.03
			Req.	6.32	4.66	6.72	6.58	4.66	4.66
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				5.44 mm, L/1727 (L: 9.40 m)			7.64 mm, L/1244 (L: 9.50 m)		



2.2.- Frame 2



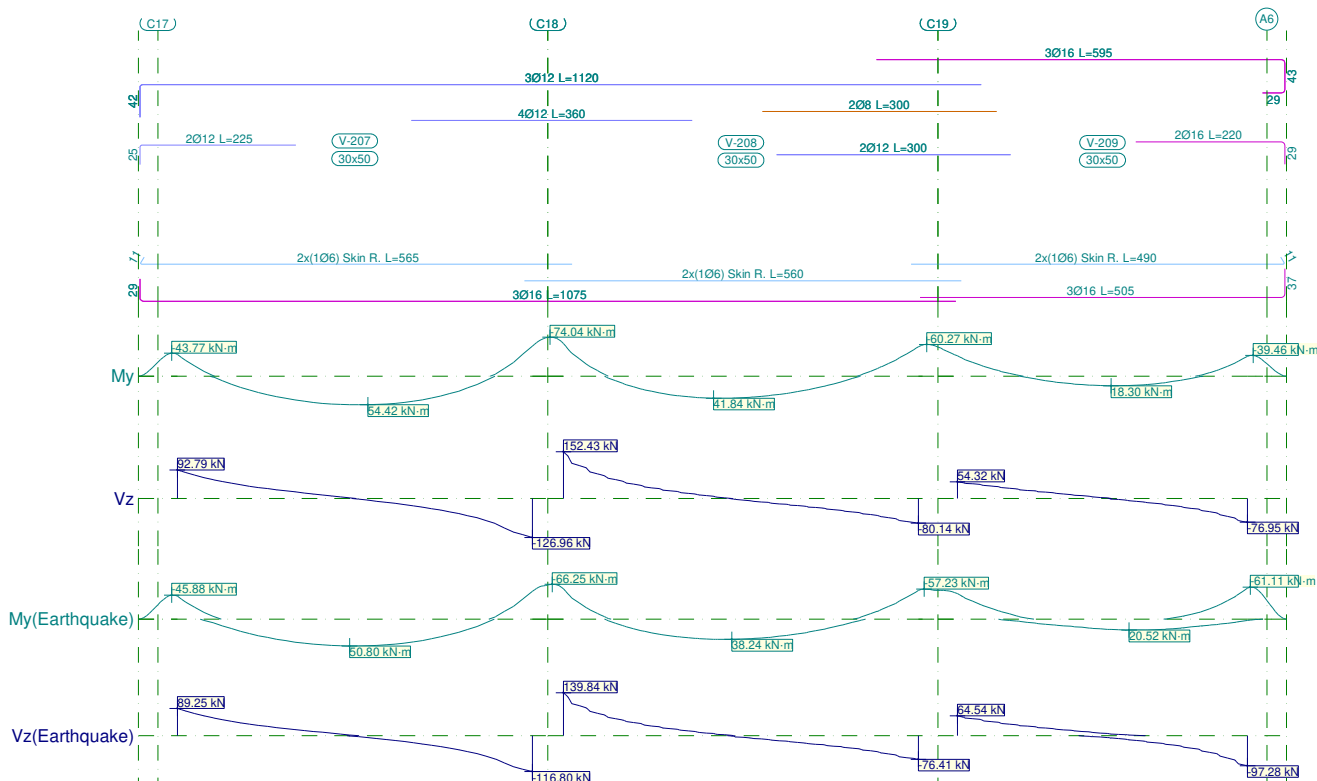
Frame 2			Span: V-206		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	--	--	--
	x	[m]	--	--	--
	Max Moment	[kN·m]	4.39	4.62	2.68
	x	[m]	0.36	0.52	0.91
	Min Shear	[kN]	--	-3.72	-7.26
	x	[m]	--	0.83	1.14
	Max Shear	[kN]	13.06	5.44	--
	x	[m]	0.00	0.44	--
	Min Torsion	[kN]	-1.61	--	--
	x	[m]	0.05	--	--
	Max Torsion	[kN]	3.11	3.26	2.89
	x	[m]	0.21	0.44	0.91



Beam reinforcement report

Frame 2				Span: V-206		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-10.42	-1.51	-5.39
		[m]		0.00	0.44	1.25
	Max Moment x	[kN·m]		11.24	7.87	4.71
		[m]		0.00	0.44	1.25
	Min Shear x	[kN]		-9.79	-12.26	-16.77
		[m]		0.00	0.83	1.25
	Max Shear x	[kN]		29.38	15.58	8.68
		[m]		0.00	0.44	1.25
	Min Torsion x	[kN]		-1.80	--	--
		[m]		0.05	--	--
Max Torsion x	[kN]		3.19	3.12	2.82	
	[m]		0.21	0.44	1.14	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.01 mm, L/102362 (L: 1.25 m)		

2.3.- Frame 3



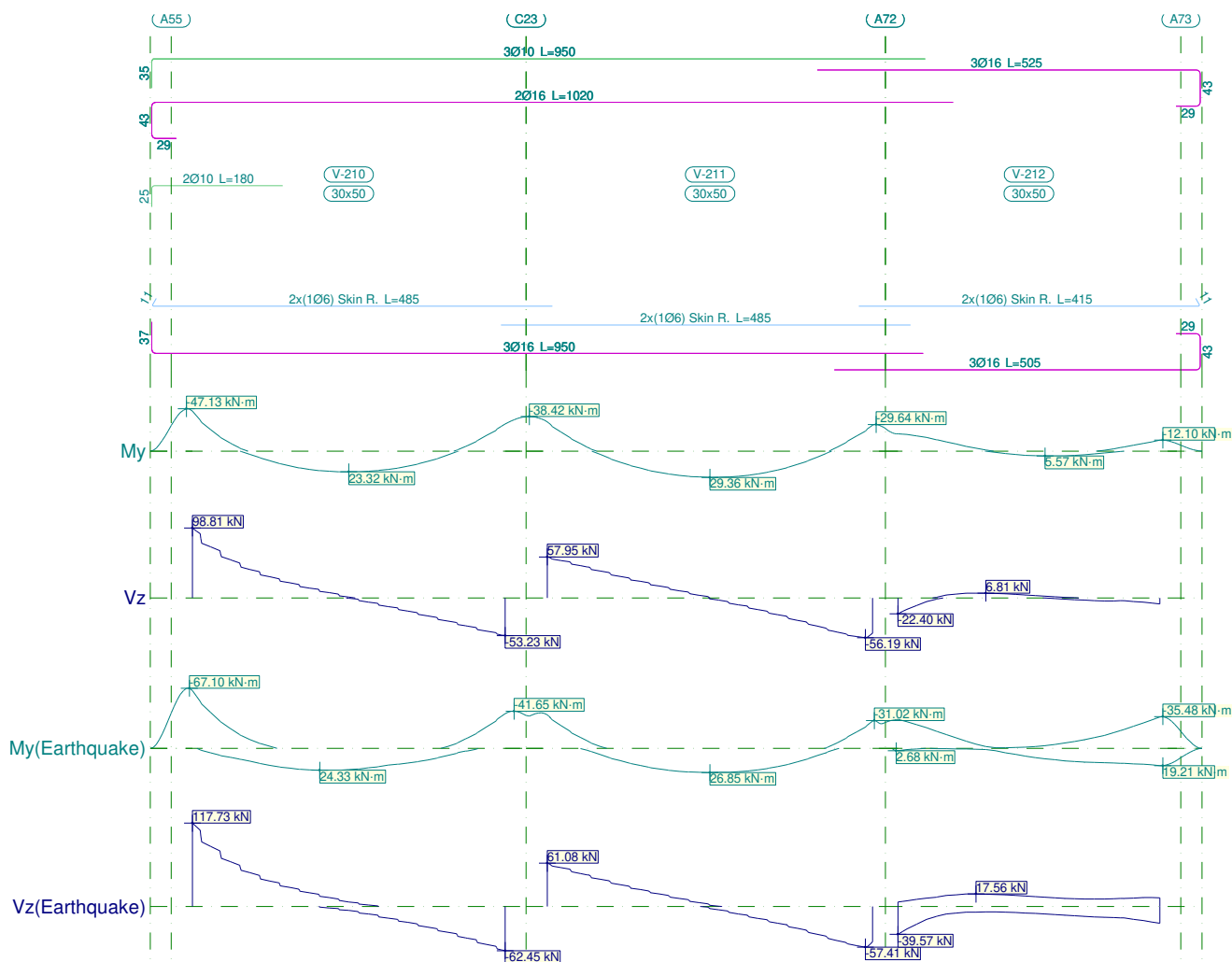


Beam reinforcement report

Frame 3				Span: V-207			Span: V-208			Span: V-209		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-41.18	--	-57.25	-62.08	--	-56.13	-38.84	--	-37.56
		x	[m]	0.00	--	4.55	0.00	--	4.55	0.00	--	3.72
	Max Moment	[kN·m]		45.23	54.42	44.88	37.79	41.84	27.05	10.39	18.30	14.43
		x	[m]	1.51	2.44	3.14	1.51	1.93	3.09	1.22	1.97	2.53
	Min Shear	[kN]		--	-23.92	-126.96	--	-23.18	-80.14	--	-13.83	-76.95
		x	[m]	--	3.03	4.55	--	3.00	4.55	--	2.43	3.72
	Max Shear	[kN]		92.79	18.20	--	152.43	16.70	--	54.32	17.52	--
		x	[m]	0.00	1.63	--	0.00	1.60	--	0.00	1.25	--
	Min Torsion	[kN]		--	--	--	-16.28	-2.06	-1.48	-2.57	--	--
		x	[m]	--	--	--	0.00	1.60	3.09	0.00	--	--
	Max Torsion	[kN]		--	--	5.10	8.21	4.96	3.13	1.94	2.97	7.93
		x	[m]	--	--	4.31	0.29	1.69	3.09	1.22	2.39	3.56
Seismic situations	Min Moment.	[kN·m]		-43.62	--	-53.07	-57.59	--	-54.65	-48.77	--	-58.98
		x	[m]	0.00	--	4.55	0.00	--	4.55	0.00	--	3.72
	Max Moment	[kN·m]		43.35	50.80	40.31	33.84	38.24	25.81	10.59	20.52	19.86
		x	[m]	1.51	2.21	3.14	1.51	2.16	3.09	1.22	2.20	2.53
	Min Shear	[kN]		--	-22.55	-116.80	--	-21.53	-76.41	--	-20.16	-97.28
		x	[m]	--	3.03	4.55	--	3.00	4.55	--	2.43	3.72
	Max Shear	[kN]		89.25	17.37	--	139.84	15.64	--	64.54	22.15	--
		x	[m]	0.00	1.63	--	0.00	1.60	--	0.00	1.25	--
	Min Torsion	[kN]		--	--	--	-14.81	-1.84	-1.57	-2.60	--	--
		x	[m]	--	--	--	0.00	1.60	4.31	0.00	--	--
	Max Torsion	[kN]		--	--	4.66	7.39	4.45	2.91	1.91	3.17	8.49
		x	[m]	--	--	4.31	0.29	1.74	3.09	0.52	2.39	3.56
Top Reinf. Area		[cm²]	Real	5.66	3.59	7.92	7.92	5.46	10.92	11.11	6.82	10.06
			Req.	4.58	3.02	7.47	7.49	3.19	6.30	4.57	4.56	6.74
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	4.56	5.61	5.61	5.46	5.56	4.56	5.03
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	4.35	11.32	11.32	11.32	3.33	3.33	3.33
			Req.	2.45	2.45	3.96	9.23	2.45	2.45	2.45	2.45	2.57
Active Defl.				1.21 mm, L/3750 (L: 4.55 m)			0.73 mm, L/6214 (L: 4.55 m)			0.12 mm, L/24719 (L: 2.88 m)		



2.4.- Frame 4



Frame 4			Span: V-210			Span: V-211			Span: V-212		
Section			30x50			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-44.4	--	-30.1	-32.5	--	-28.7	-19.3	--	-12.0
			0	--	1	1	--	1	3	--	2
	x	[m]	0.00	--	3.70	0.00	--	3.85	0.00	--	3.10
	Max Moment	[kN·m]	16.56	23.3	16.7	22.0	29.3	23.8	--	5.57	4.84
				2	6	3	6	1			
	x	[m]	1.15	1.85	2.55	1.23	1.93	2.60	--	1.74	2.09
	Min Shear	[kN]	--	-16.7	-53.2	--	-16.4	-56.1	-22.4	-1.68	-8.36
				1	3		9	9	0		
	x	[m]	--	2.44	3.70	--	2.50	3.77	0.00	1.97	3.10
	Max Shear	[kN]	98.81	19.0	--	57.9	16.7	--	6.66	6.81	0.22
				9		5	1				
	x	[m]	0.00	1.26	--	0.00	1.33	--	0.92	1.04	2.09
	Min Torsion	[kN]	-5.36	--	--	-5.21	-5.52	-5.73	-12.4	-2.12	--
									1		
	x	[m]	0.00	--	--	1.20	2.37	3.07	0.00	1.04	--
	Max Torsion	[kN]	6.32	5.51	5.25	--	--	4.41	--	--	9.97
	x	[m]	0.33	1.26	2.66	--	--	3.79	--	--	2.91

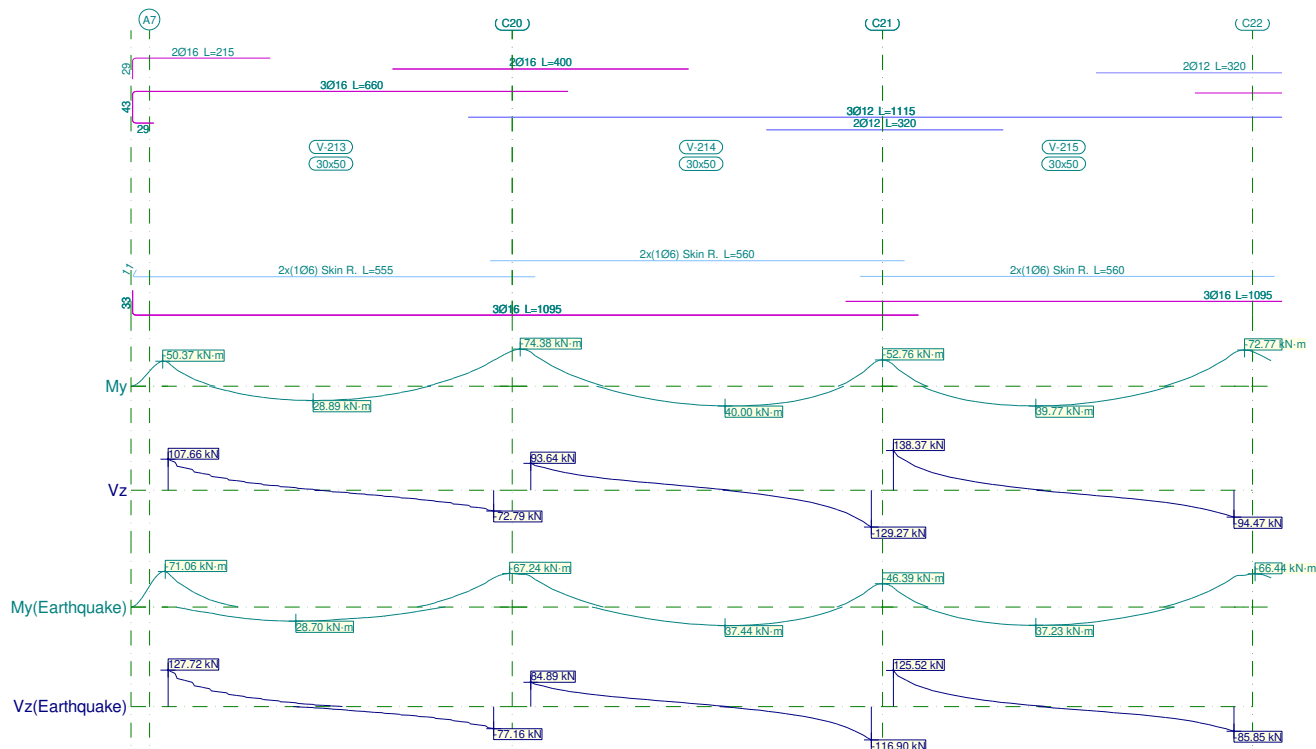


Beam reinforcement report

Frame 4				Span: V-210			Span: V-211			Span: V-212		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-64.4 1	--	-38.8 6	-37.3 4	--	-30.3 7	-32.3 4	-6.06 6	-35.2 6
		x	[m]	0.00	--	3.70	0.00	--	3.85	0.00	1.97	3.10
	Max Moment	[kN·m]		21.99	24.3 3	16.2 1	21.4 8	26.8 5	22.4 2	2.50	13.8 6	19.1 1
		x	[m]	1.15	1.51	2.55	1.23	1.93	2.60	0.00	1.97	3.10
	Min Shear	[kN]		--	-20.7 9	-62.4 5	--	-16.7 9	-57.4 1	-39.5 7	-12.3 1	-23.9 2
		x	[m]	--	2.44	3.70	--	2.50	3.77	0.00	1.97	3.10
	Max Shear	[kN]		117.7 3	24.5 3	--	61.0 8	17.5 2	--	17.5 6	17.4 6	12.5 1
		x	[m]	0.00	1.26	--	0.00	1.33	--	0.92	1.04	2.91
	Min Torsion	[kN]		-5.79	--	--	-4.96	-5.27	-5.41	-11.7 8	-2.24	--
		x	[m]	0.00	--	--	1.23	2.37	2.86	0.00	1.04	--
	Max Torsion	[kN]		7.14	5.65	4.92	--	--	4.46	--	--	10.3 4
		x	[m]	0.33	1.26	3.13	--	--	3.79	--	--	2.91
Top Reinf. Area		[cm²]	Real	7.95	6.38	6.38	6.38	6.38	11.5 8	11.0 9	6.03	6.03
			Req.	7.08	4.57	5.59	5.48	3.19	5.38	5.06	4.56	5.23
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	10.7 7	9.12	6.03	6.03
			Req.	4.59	4.59	4.56	4.82	4.88	5.79	5.55	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	3.33	3.33	3.33	4.35	3.33	3.54
			Req.	2.61	2.45	2.45	2.45	2.45	2.45	4.02	2.45	3.23
Active Defl.				0.25 mm, L/14690 (L: 3.70 m)			0.43 mm, L/8987 (L: 3.85 m)			0.05 mm, L/57175 (L: 3.10 m)		



2.5.- Frame 5



Frame 5			Span: V-213			Span: V-214			Span: V-215		
Section			30x50			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-47.3	--	-52.2	-68.7	--	-42.6	-42.8	--	-66.7
			5	--	0	2	--	4	4	--	7
	x	[m]	0.00	--	4.40	0.00	--	4.60	0.00	--	4.60
	Max Moment	[kN·m]	24.24	28.8	15.8	21.0	40.0	38.06	37.17	39.7	23.3
				9	4	3	0			7	0
	x	[m]	1.39	1.96	3.02	1.46	2.63	3.09	1.46	1.93	3.09
	Min Shear	[kN]	--	-21.4	-72.7	--	-10.5	-129.2	--	-24.1	-94.4
				2	9		4	7		8	7
	x	[m]	--	2.92	4.40	--	2.98	4.60	--	2.98	4.60
	Max Shear	[kN]	107.6	14.8	--	93.6	26.4	--	138.3	12.3	--
			6	3		4	6		7	9	
	x	[m]	0.00	1.49	--	0.00	1.58	--	0.00	1.58	--
	Min Torsion	[kN]	-7.52	--	--	--	--	--	--	--	--
	x	[m]	0.00	--	--	--	--	--	--	--	--
	Max Torsion	[kN]	5.47	3.81	3.07	--	--	--	--	--	--
	x	[m]	0.33	1.49	4.06	--	--	--	--	--	--

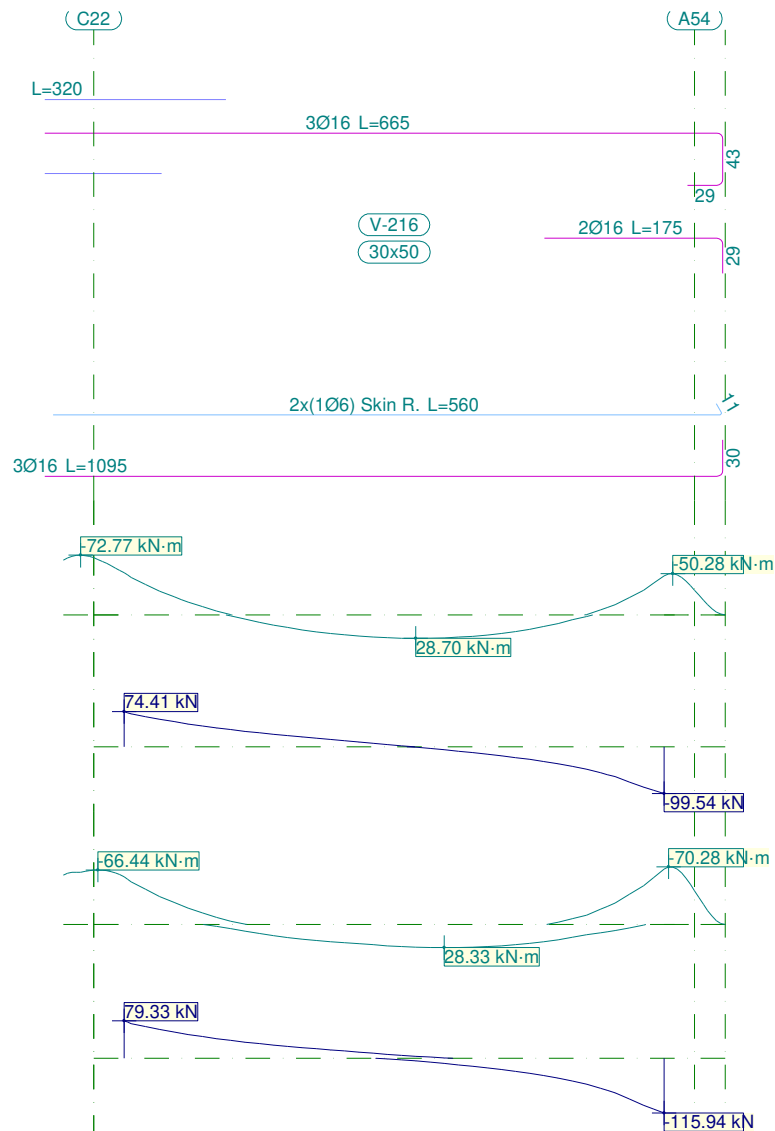


Beam reinforcement report

Frame 5				Span: V-213			Span: V-214			Span: V-215		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-68.14	--	-58.55	-61.64	--	-38.58	-38.86	--	-60.06
		[m]		0.00	--	4.40	0.00	--	4.60	0.00	--	4.60
	Max Moment	[kN·m]		27.32	28.70	16.44	20.25	37.44	35.33	34.33	37.23	22.28
		[m]		1.39	1.73	3.02	1.46	2.63	3.09	1.46	1.93	3.09
	Min Shear	[kN]		--	-23.63	-77.16	--	-10.01	-116.90	--	-21.10	-85.85
		[m]		--	2.92	4.40	--	2.98	4.60	--	2.98	4.60
	Max Shear	[kN]		127.72	119.71	--	84.89	23.83	--	125.52	111.59	--
		[m]		0.00	1.49	--	0.00	1.58	--	0.00	1.58	--
	Min Torsion	[kN]		-7.84	--	--	--	--	--	-1.47	--	--
		[m]		0.00	--	--	--	--	--	0.00	--	--
	Max Torsion	[kN]		6.25	4.04	3.18	--	--	--	--	--	--
		[m]		0.36	1.49	4.06	--	--	--	--	--	--
Top Reinf. Area		[cm²]	Real	10.06	6.03	12.10	11.41	6.35	5.66	5.66	4.35	9.83
			Req.	7.33	3.36	7.35	4.67	3.36	4.80	4.76	3.02	4.62
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	9.61	9.51	6.03	6.03
			Req.	5.03	4.85	6.05	5.70	4.56	4.56	4.56	4.56	4.92
Transv. Reinf. Area		[cm²/m]	Real	4.04	3.33	3.33	2.46	2.46	2.83	3.54	2.46	2.46
			Req.	3.76	2.45	2.45	2.45	2.45	2.48	3.05	2.45	2.45
Active Defl.				0.36 mm, L/11466 (L: 4.07 m)			0.74 mm, L/6126 (L: 4.54 m)			0.75 mm, L/6098 (L: 4.60 m)		



Beam reinforcement report



Frame 5			Span: V-216		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-51.49	--	-47.70
	x	[m]	0.00	--	4.43
	Max Moment	[kN·m]	18.29	28.70	24.51
	x	[m]	1.46	2.39	2.98
	Min Shear	[kN]	--	-12.53	-99.54
	x	[m]	--	2.86	4.43
	Max Shear	[kN]	74.41	17.74	--
	x	[m]	0.00	1.58	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	4.53
	x	[m]	--	--	4.26

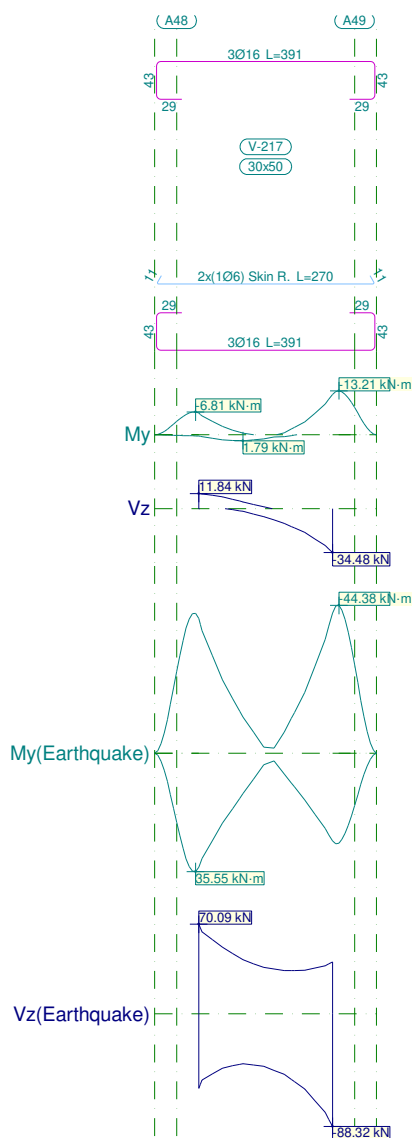


Beam reinforcement report

Frame 5				Span: V-216		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-58.11	--	-67.70
		[m]		0.00	--	4.43
	Max Moment x	[kN·m]		17.98	28.33	27.02
		[m]		1.46	2.63	2.98
	Min Shear x	[kN]		--	-17.00	-115.94
		[m]		--	2.86	4.43
	Max Shear x	[kN]		79.33	20.17	--
		[m]		0.00	1.58	--
	Min Torsion x	[kN]		-1.41	--	--
		[m]		0.00	--	--
Max Torsion x	[kN]		--	--	4.73	
	[m]		--	--	4.26	
Top Reinf. Area		[cm²]	Real	10.12	6.03	10.06
			Req.	4.67	3.02	7.29
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.06	4.56	5.03
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.36 mm, L/11604 (L: 4.14 m)		



2.6.- Frame 6



Frame 6			Span: V-217		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-6.54	--	-12.13
	x	[m]	0.00	--	1.52
	Max Moment	[kN·m]	1.79	1.52	--
	x	[m]	0.50	0.62	--
	Min Shear	[kN]	-2.14	-11.55	-34.48
	x	[m]	0.50	0.97	1.52
	Max Shear	[kN]	11.84	3.14	--
	x	[m]	0.00	0.62	--
	Min Torsion	[kN]	-1.40	--	--
	x	[m]	0.00	--	--
	Max Torsion	[kN]	--	--	1.44
	x	[m]	--	--	1.44

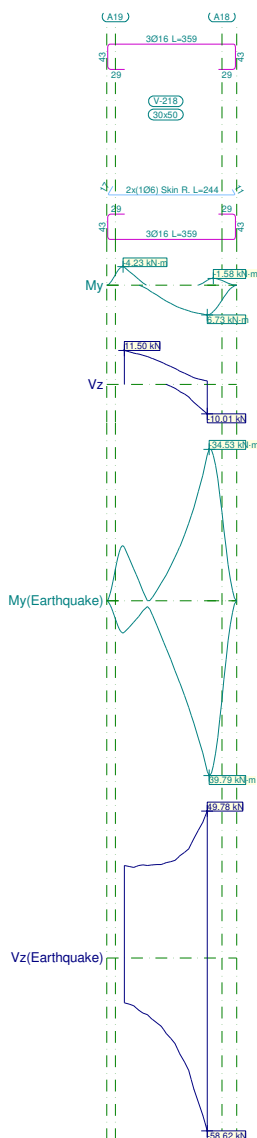


Beam reinforcement report

Frame 6				Span: V-217		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-40.46	-6.32	-42.08
		[m]		0.00	0.62	1.52
	Max Moment x	[kN·m]		34.25	7.84	26.36
		[m]		0.00	0.62	1.52
	Min Shear x	[kN]		-58.42	-47.50	-88.32
		[m]		0.00	0.97	1.52
	Max Shear x	[kN]		70.09	39.16	40.47
		[m]		0.00	0.62	1.52
	Min Torsion x	[kN]		-2.94	--	--
		[m]		0.00	--	--
Max Torsion x	[kN]		1.53	--	2.38	
	[m]		0.00	--	1.44	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.62	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.16	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.12 mm, L/25378 (L: 3.04 m)		



2.7.- Frame 7



Frame 7			Span: V-218		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-4.09	--	--
	x	[m]	0.00	--	--
	Max Moment	[kN·m]	--	5.10	6.73
	x	[m]	--	0.93	1.40
	Min Shear	[kN]	--	-2.36	-10.01
	x	[m]	--	0.93	1.40
	Max Shear	[kN]	11.50	8.77	4.42
	x	[m]	0.00	0.47	0.94
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

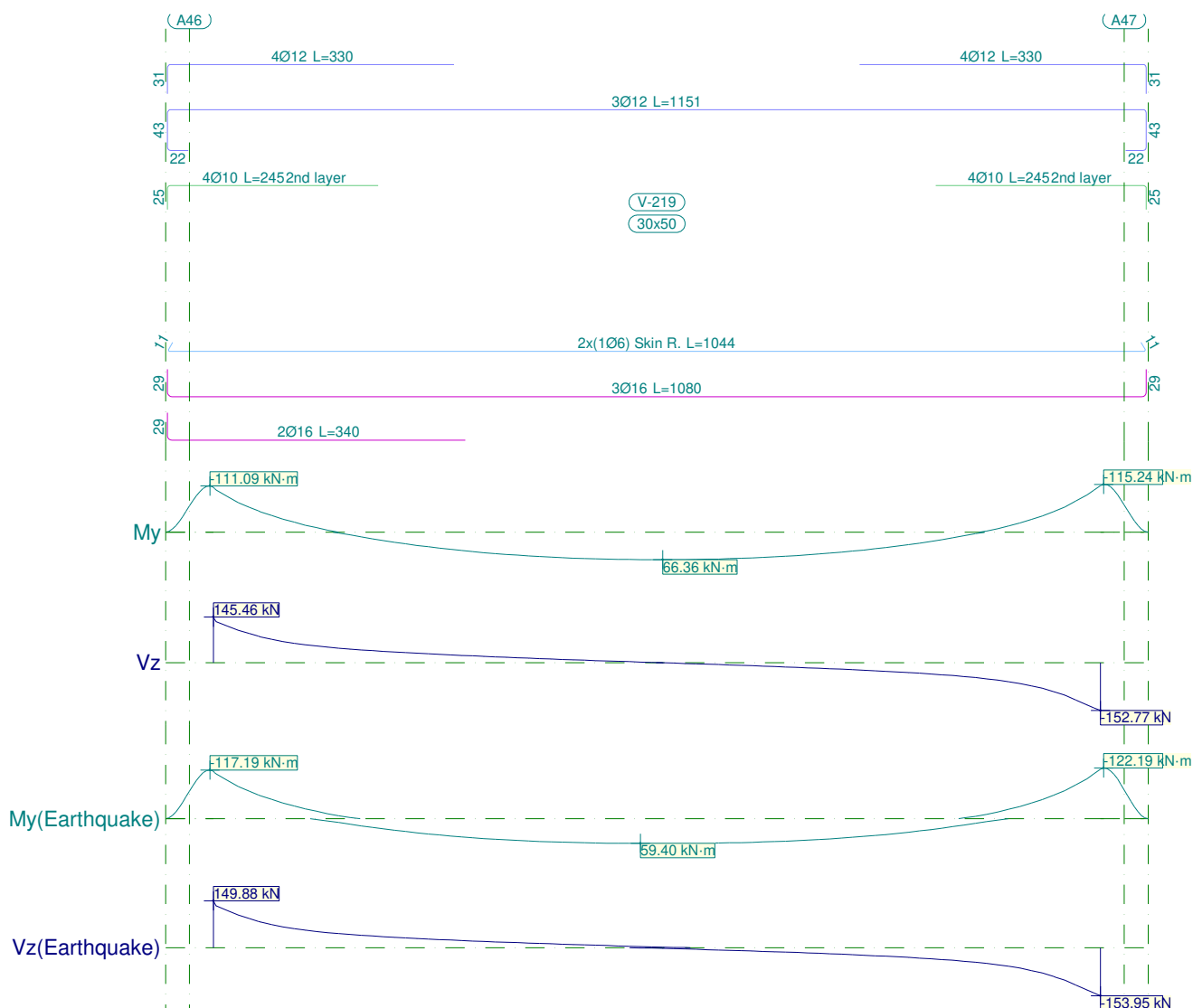


Beam reinforcement report

Frame 7				Span: V-218		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-12.18	-12.16	-33.25
		[m]		0.00	0.93	1.40
	Max Moment x	[kN·m]		7.16	18.49	38.84
		[m]		0.00	0.93	1.40
	Min Shear x	[kN]		-20.05	-32.27	-58.62
		[m]		0.43	0.93	1.40
	Max Shear x	[kN]		31.52	34.43	49.78
		[m]		0.32	0.93	1.40
	Min Torsion x	[kN]		--	--	-1.60
		[m]		--	--	1.33
Max Torsion x	[kN]		--	--	2.44	
	[m]		--	--	1.33	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.01 mm, L/117417 (L: 1.40 m)		



2.8.- Frame 8



Frame 8			Span: V-219		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-108.18	--	-112.17
	x	[m]	0.00	--	9.27
	Max Moment	[kN·m]	53.61	66.36	54.59
	x	[m]	3.06	4.69	6.21
	Min Shear	[kN]	--	-14.92	-152.77
	x	[m]	--	6.09	9.27
	Max Shear	[kN]	145.46	15.72	--
	x	[m]	0.00	3.18	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	1.69	--	--
	x	[m]	0.00	--	--

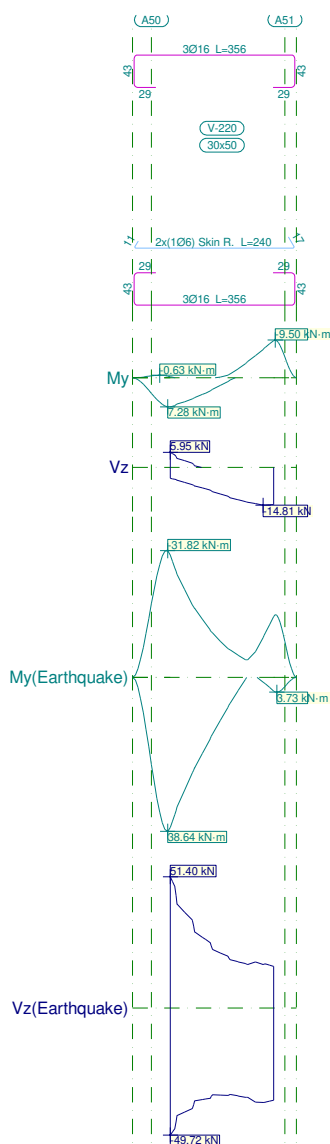


Beam reinforcement report

Frame 8				Span: V-219		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-114.24	--	-119.19
		[m]		0.00	--	9.27
	Max Moment x	[kN·m]		51.10	59.40	51.61
		[m]		3.06	4.46	6.21
	Min Shear x	[kN]		--	-15.44	-153.95
		[m]		--	6.09	9.27
	Max Shear x	[kN]		149.88	16.00	--
		[m]		0.00	3.18	--
	Min Torsion x	[kN]		-1.66	--	--
		[m]		0.00	--	--
	Max Torsion x	[kN]		3.75	--	1.51
		[m]		0.00	--	9.13
Top Reinf. Area		[cm²]	Real	11.06	3.39	11.06
			Req.	10.27	3.02	7.44
Bot. Reinf. Area		[cm²]	Real	10.06	6.03	6.03
			Req.	5.53	4.66	5.53
Transv. Reinf. Area		[cm²/m]	Real	4.35	2.46	5.03
			Req.	3.89	2.45	4.44
Active Defl.				6.03 mm, L/1536 (L: 9.27 m)		



2.9.- Frame 9



Frame 9			Span: V-220		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	--	-2.26	-9.36
	x	[m]	--	0.90	1.37
	Max Moment	[kN·m]	7.26	3.80	--
	x	[m]	0.00	0.47	--
	Min Shear	[kN]	-8.04	-12.67	-14.81
	x	[m]	0.42	0.90	1.23
	Max Shear	[kN]	5.95	--	--
	x	[m]	0.00	--	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

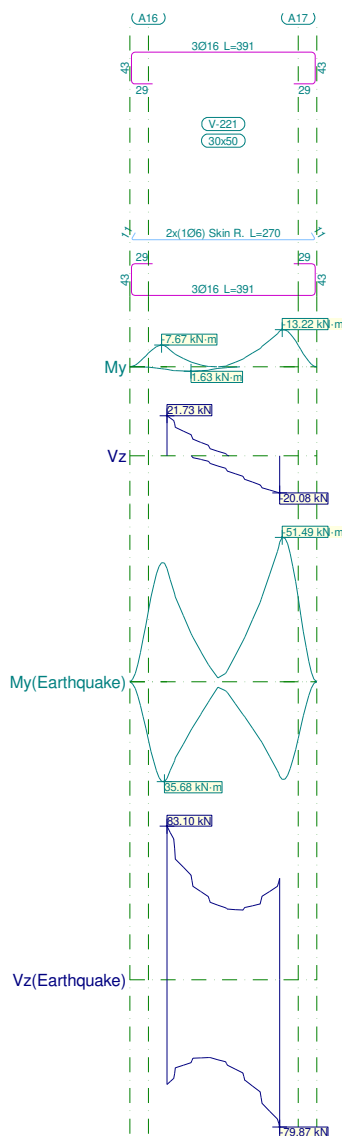


Beam reinforcement report

Frame 9				Span: V-220		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-30.69	-13.43	-15.28
		[m]		0.00	0.47	1.37
	Max Moment x	[kN·m]		37.65	17.54	3.42
		[m]		0.00	0.47	1.37
	Min Shear x	[kN]		-49.72	-35.63	-37.02
		[m]		0.00	0.47	1.23
	Max Shear x	[kN]		51.40	26.78	17.97
		[m]		0.00	0.47	1.12
	Min Torsion x	[kN]		-3.00	-1.56	--
		[m]		0.06	0.53	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.02	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.36	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.37 m)		



2.10.- Frame 10



Frame 10			Span: V-221		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-6.92	-1.58	-12.79
	x	[m]	0.00	0.92	1.52
	Max Moment	[kN·m]	1.63	--	--
	x	[m]	0.32	--	--
	Min Shear	[kN]	-2.08	-9.76	-20.08
	x	[m]	0.47	0.92	1.52
	Max Shear	[kN]	21.73	5.72	--
	x	[m]	0.00	0.56	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

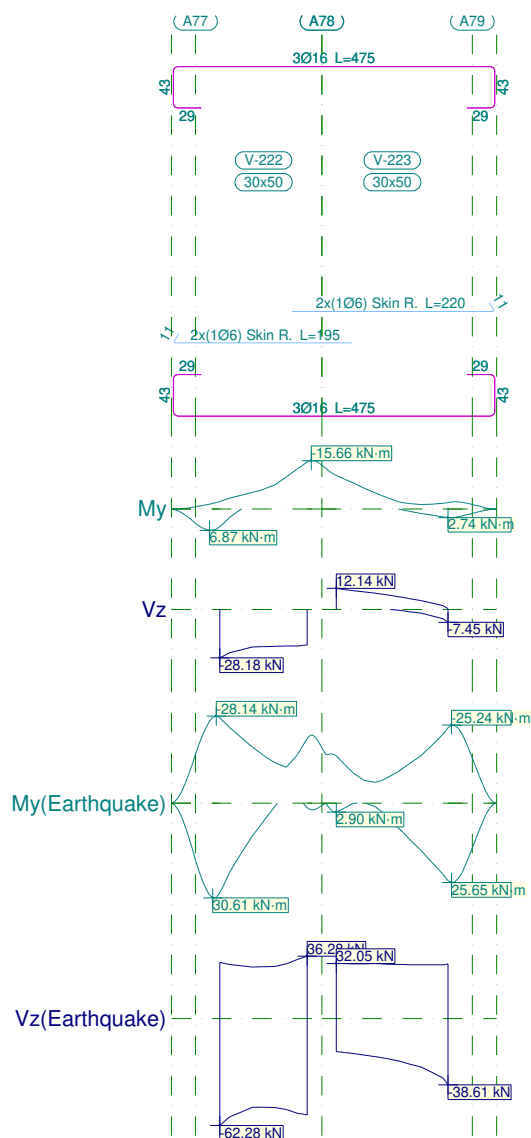


Beam reinforcement report

Frame 10				Span: V-221		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-40.36	-9.26	-49.76
		[m]		0.00	0.92	1.52
	Max Moment x	[kN·m]		34.43	7.80	33.64
		[m]		0.00	0.92	1.52
	Min Shear x	[kN]		-56.79	-48.51	-79.87
		[m]		0.00	0.92	1.52
	Max Shear x	[kN]		83.10	45.07	54.89
		[m]		0.00	0.56	1.52
	Min Torsion x	[kN]		-1.72	--	-1.77
		[m]		0.00	--	1.49
Max Torsion x	[kN]		2.32	1.73	2.33	
	[m]		0.09	0.79	1.49	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.52 m)		



2.11.- Frame 11



Frame 11			Span: V-222			Span: V-223		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-4.45	-7.90	-15.18	-10.84	-5.16	-2.14
	x	[m]	0.22	0.57	0.90	0.00	0.40	1.15
	Max Moment	[kN·m]	5.68	--	--	--	--	2.74
	x	[m]	0.00	--	--	--	--	1.15
	Min Shear	[kN]	-28.18	-21.77	-21.31	--	-1.28	-7.45
	x	[m]	0.00	0.34	0.69	--	0.75	1.15
	Max Shear	[kN]	--	--	--	12.14	9.40	5.17
	x	[m]	--	--	--	0.00	0.40	0.87
	Min Torsion	[kN]	--	--	--	--	--	-2.01
	x	[m]	--	--	--	--	--	1.10
	Max Torsion	[kN]	--	--	--	--	--	--
	x	[m]	--	--	--	--	--	--

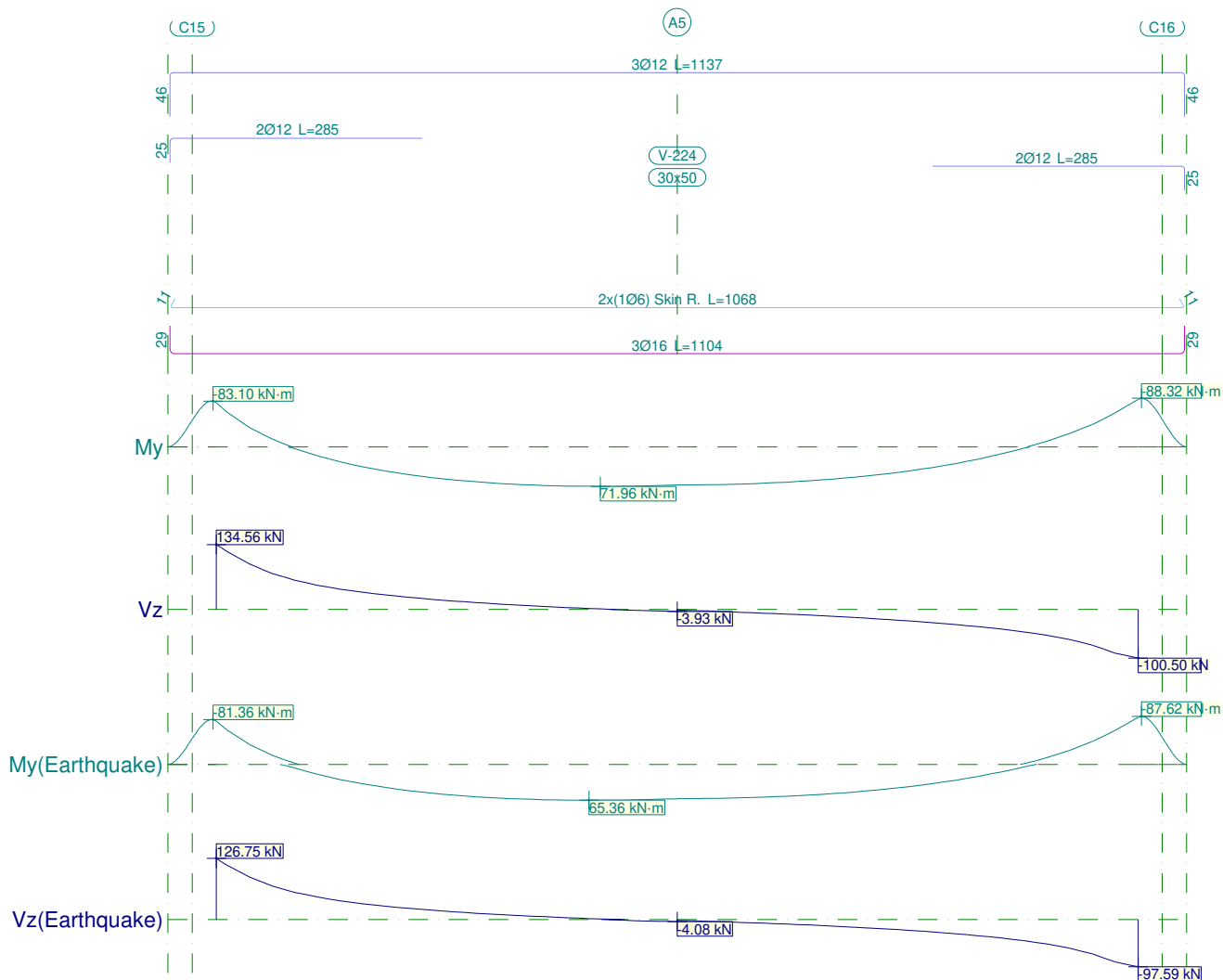


Beam reinforcement report

Frame 11				Span: V-222			Span: V-223		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-27.60	-18.10	-20.89	-15.36	-12.70	-24.44
		[m]		0.00	0.34	0.90	0.00	0.75	1.15
	Max Moment x	[kN·m]		28.96	10.58	1.40	2.90	11.60	25.04
		[m]		0.00	0.34	0.90	0.00	0.75	1.15
	Min Shear x	[kN]		-62.28	-51.77	-56.08	-21.16	-26.38	-38.61
		[m]		0.00	0.57	0.90	0.29	0.75	1.15
	Max Shear x	[kN]		32.77	30.38	36.28	32.05	31.92	31.74
		[m]		0.00	0.57	0.90	0.00	0.40	1.15
	Min Torsion x	[kN]		-2.24	--	--	--	--	-3.13
		[m]		0.00	--	--	--	--	1.10
	Max Torsion x	[kN]		--	--	--	--	--	--
		[m]		--	--	--	--	--	--
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	4.56	4.56	4.56	4.64
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	4.56	4.56	4.56	4.63
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46	3.33	3.33	3.33
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 0.90 m)			0.00 mm, <L/1000 (L: 1.15 m)		



2.12.- Frame 12



Frame 12			Span: V-224		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-80.13	--	-86.48
	x	[m]	0.00	--	9.50
	Max Moment	[kN·m]	68.80	71.96	58.96
	x	[m]	3.14	3.96	6.34
	Min Shear	[kN]	--	-12.77	-100.50
	x	[m]	--	6.23	9.50
	Max Shear	[kN]	134.56	7.47	--
	x	[m]	0.00	3.26	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

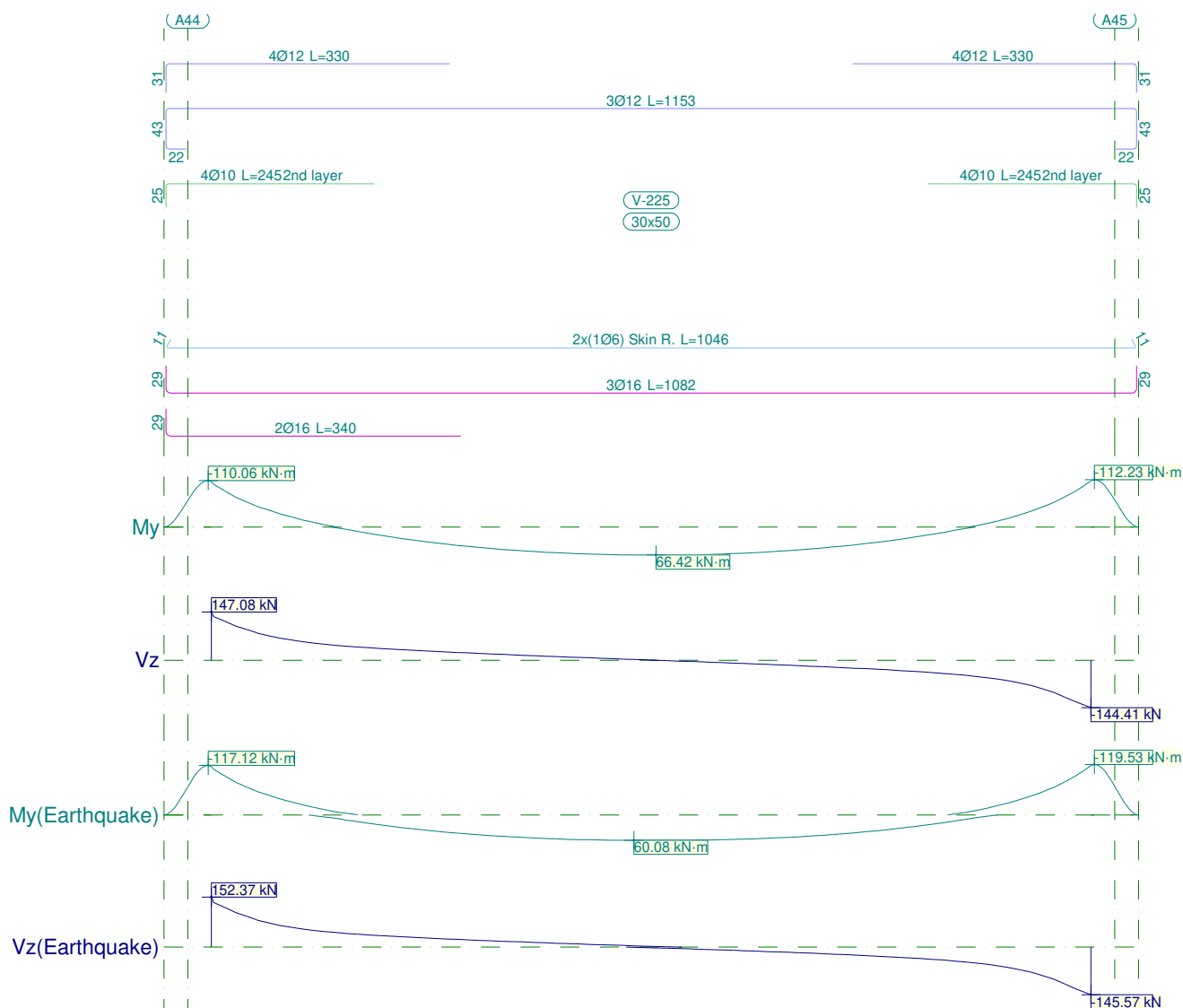


Beam reinforcement report

Frame 12				Span: V-224		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-78.60	--	-85.87
		[m]		0.00	--	9.50
	Max Moment x	[kN·m]		63.11	65.36	53.36
		[m]		3.14	3.84	6.34
	Min Shear x	[kN]		--	-12.09	-97.59
		[m]		--	6.23	9.50
	Max Shear x	[kN]		126.75	7.22	--
		[m]		0.00	3.26	--
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	5.66	3.39	5.66
			Req.	4.84	3.02	5.16
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.66	4.66	4.66
Transv. Reinf. Area		[cm²/m]	Real	3.54	2.46	2.46
			Req.	3.15	2.45	2.45
Active Defl.				10.01 mm, L/949 (L: 9.50 m)		



2.13.- Frame 13



Frame 13			Span: V-225		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-107.09	--	-109.38
	x	[m]	0.00	--	9.28
	Max Moment	[kN·m]	52.88	66.42	53.96
	x	[m]	3.06	4.69	6.21
	Min Shear	[kN]	--	-15.45	-144.41
	x	[m]	--	6.09	9.28
	Max Shear	[kN]	147.08	16.31	--
	x	[m]	0.00	3.17	--
	Min Torsion	[kN]	-1.61	--	--
	x	[m]	0.00	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

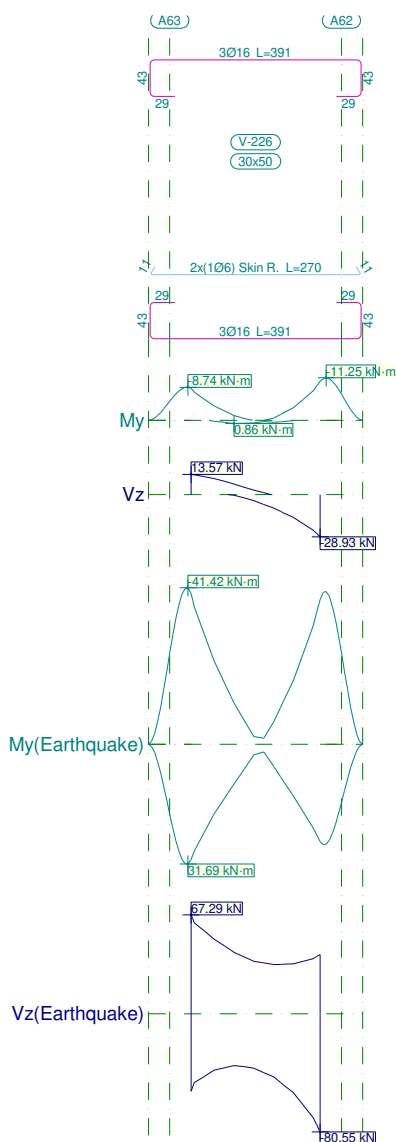


Beam reinforcement report

Frame 13				Span: V-225		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-114.09	--	-116.75
		[m]		0.00	--	9.28
	Max Moment x	[kN·m]		50.81	60.08	51.66
		[m]		3.06	4.46	6.21
	Min Shear x	[kN]		--	-16.05	-145.57
		[m]		--	6.09	9.28
	Max Shear x	[kN]		152.37	16.69	--
		[m]		0.00	3.17	--
	Min Torsion x	[kN]		-4.34	--	--
		[m]		0.00	--	--
Max Torsion x	[kN]		2.83	--	--	
	[m]		0.00	--	--	
Top Reinf. Area		[cm²]	Real	11.06	3.39	11.06
			Req.	10.27	3.02	7.23
Bot. Reinf. Area		[cm²]	Real	10.06	6.03	6.03
			Req.	5.53	4.66	5.53
Transv. Reinf. Area		[cm²/m]	Real	4.72	2.46	4.35
			Req.	3.99	2.45	3.83
Active Defl.				6.16 mm, L/1508 (L: 9.28 m)		



2.14.- Frame 14



Frame 14			Span: V-226		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-8.45	--	-10.30
	x	[m]	0.00	--	1.52
	Max Moment	[kN·m]	--	--	--
	x	[m]	--	--	--
	Min Shear	[kN]	-0.57	-9.26	-28.93
	x	[m]	0.51	0.97	1.52
	Max Shear	[kN]	13.57	5.01	--
	x	[m]	0.00	0.62	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

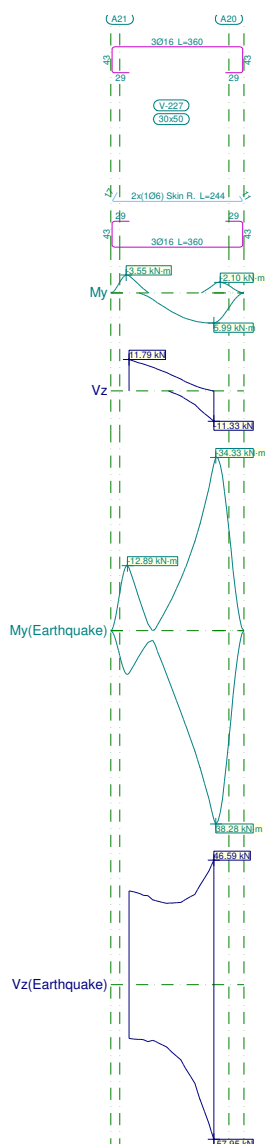


Beam reinforcement report

Frame 14				Span: V-226		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-39.94	-6.42	-38.34
		[m]		0.00	0.62	1.52
	Max Moment x	[kN·m]		30.51	6.68	25.79
		[m]		0.00	0.62	1.52
	Min Shear x	[kN]		-52.79	-43.08	-80.55
		[m]		0.00	0.97	1.52
	Max Shear x	[kN]		67.29	38.76	40.37
		[m]		0.00	0.62	1.52
	Min Torsion x	[kN]		-1.72	--	-1.97
		[m]		0.00	--	1.44
Max Torsion x	[kN]		2.47	--	--	
	[m]		0.00	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.52 m)		



2.15.- Frame 15



Frame 15			Span: V-227		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-3.40	--	-1.66
	x	[m]	0.00	--	1.40
	Max Moment	[kN·m]	1.63	5.05	5.99
	x	[m]	0.43	0.94	1.40
	Min Shear	[kN]	--	-2.97	-11.33
	x	[m]	--	0.94	1.40
	Max Shear	[kN]	11.79	8.19	3.38
	x	[m]	0.00	0.47	0.94
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

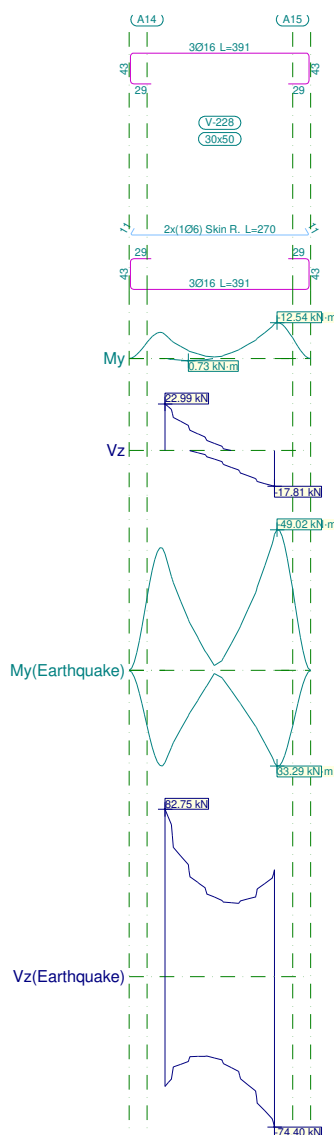


Beam reinforcement report

Frame 15				Span: V-227		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-12.42	-12.51	-33.08
	x	[m]		0.00	0.94	1.40
	Max Moment	[kN·m]		8.40	18.66	37.42
	x	[m]		0.00	0.94	1.40
	Min Shear	[kN]		-21.34	-31.34	-57.95
	x	[m]		0.32	0.94	1.40
	Max Shear	[kN]		35.14	31.85	46.59
	x	[m]		0.00	0.94	1.40
	Min Torsion	[kN]		-1.44	--	-2.20
	x	[m]		0.16	--	1.33
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.01 mm, L/114004 (L: 1.40 m)		



2.16.- Frame 16



Frame 16			Span: V-228		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-8.40	-2.01	-12.17
	x	[m]	0.00	0.92	1.52
	Max Moment	[kN·m]	--	--	--
	x	[m]	--	--	--
	Min Shear	[kN]	-1.23	-8.34	-17.81
	x	[m]	0.47	0.92	1.52
	Max Shear	[kN]	22.99	6.64	--
	x	[m]	0.00	0.56	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

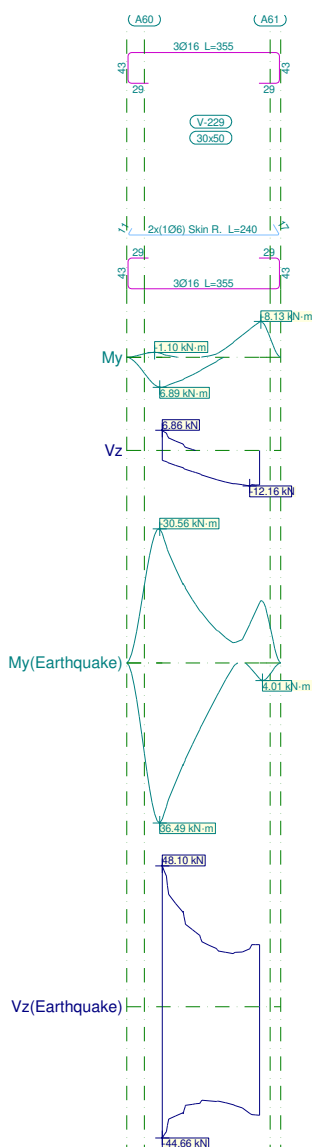


Beam reinforcement report

Frame 16				Span: V-228		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-40.61	-9.26	-47.42
		[m]		0.00	0.92	1.52
	Max Moment x	[kN·m]		32.02	7.00	32.13
		[m]		0.00	0.92	1.52
	Min Shear x	[kN]		-54.21	-44.93	-74.40
		[m]		0.00	0.92	1.52
	Max Shear x	[kN]		82.75	43.95	52.93
		[m]		0.00	0.56	1.52
	Min Torsion x	[kN]		-2.13	-1.45	-1.86
		[m]		0.09	0.56	1.49
Max Torsion x	[kN]		1.84	--	1.53	
	[m]		0.00	--	1.49	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.52 m)		



2.17.- Frame 17



Frame 17			Span: V-229		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	--	-2.12	-8.04
	x	[m]	--	0.89	1.36
	Max Moment	[kN·m]	6.89	3.63	--
	x	[m]	0.00	0.47	--
	Min Shear	[kN]	-7.22	-10.82	-12.16
	x	[m]	0.42	0.89	1.22
	Max Shear	[kN]	6.86	--	--
	x	[m]	0.00	--	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

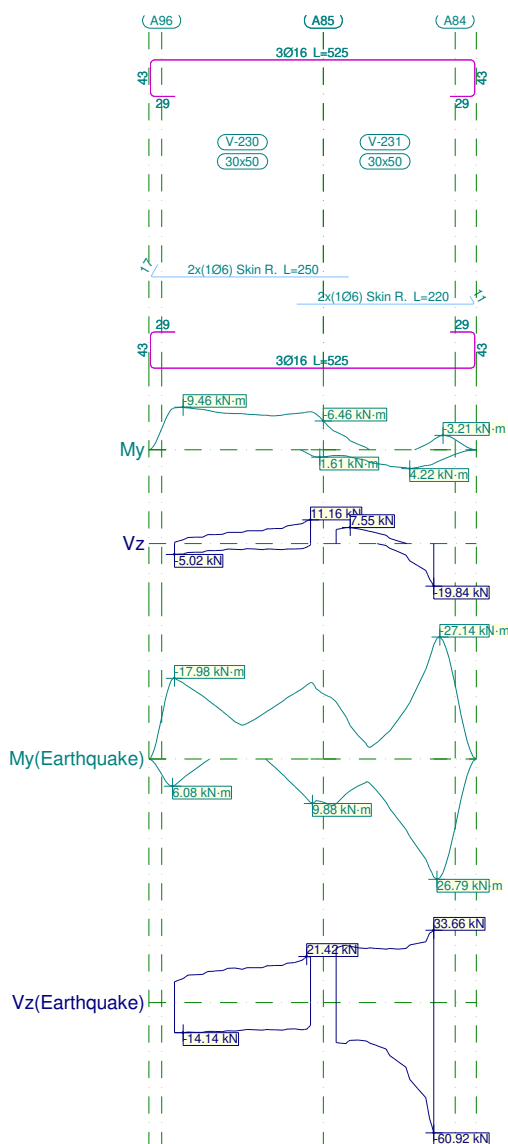


Beam reinforcement report

Frame 17				Span: V-229		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-29.53	-13.32	-13.73
		[m]		0.00	0.47	1.36
	Max Moment x	[kN·m]		35.64	17.08	3.57
		[m]		0.00	0.47	1.36
	Min Shear x	[kN]		-44.66	-33.06	-37.00
		[m]		0.00	0.47	1.36
	Max Shear x	[kN]		48.10	25.47	21.26
		[m]		0.00	0.47	1.36
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		2.69	--	--	
	[m]		0.06	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.36 m)		



2.18.- Frame 18



Frame 18			Span: V-230			Span: V-231		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-9.46	-8.18	-8.48	-3.99	--	-2.27
	x	[m]	0.10	0.57	1.60	0.00	--	1.15
	Max Moment	[kN·m]	--	--	--	2.59	3.85	4.22
	x	[m]	--	--	--	0.38	0.73	0.87
	Min Shear	[kN]	-5.02	-3.17	-2.80	--	-3.75	-19.84
	x	[m]	0.00	0.57	1.27	--	0.73	1.15
	Max Shear	[kN]	4.27	6.49	11.16	7.55	5.75	0.27
	x	[m]	0.48	1.06	1.60	0.17	0.40	0.82
	Min Torsion	[kN]	--	--	--	-1.80	-2.54	-4.17
	x	[m]	--	--	--	0.36	0.59	1.06
	Max Torsion	[kN]	--	--	--	--	--	--
	x	[m]	--	--	--	--	--	--

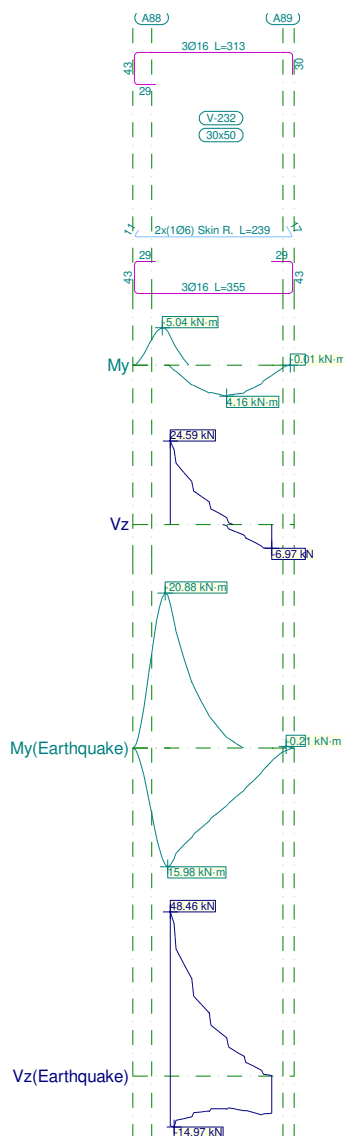


Beam reinforcement report

Frame 18				Span: V-230			Span: V-231		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-17.98	-10.65	-17.03	-12.69	-8.73	-25.48
		[m]		0.00	0.57	1.60	0.00	0.73	1.15
	Max Moment x	[kN·m]		5.94	--	9.71	9.94	13.40	26.27
		[m]		0.00	--	1.60	0.00	0.73	1.15
	Min Shear x	[kN]		-14.14	-13.64	-12.97	-19.21	-27.51	-60.92
		[m]		0.10	0.57	1.27	0.12	0.73	1.15
	Max Shear x	[kN]		14.67	16.68	21.42	26.85	25.54	33.66
		[m]		0.48	1.06	1.56	0.12	0.40	1.15
	Min Torsion x	[kN]		--	--	-1.69	-2.18	-3.07	-4.87
		[m]		--	--	1.56	0.36	0.61	1.06
Max Torsion x	[kN]		--	--	--	--	--	--	
	[m]		--	--	--	--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	4.56	4.56	4.56	4.75
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	4.56	4.56	4.59	4.70
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46	3.33	3.33	3.33
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.15 mm, L/21978 (L: 3.21 m)			0.00 mm, <L/1000 (L: 1.15 m)		



2.19.- Frame 19



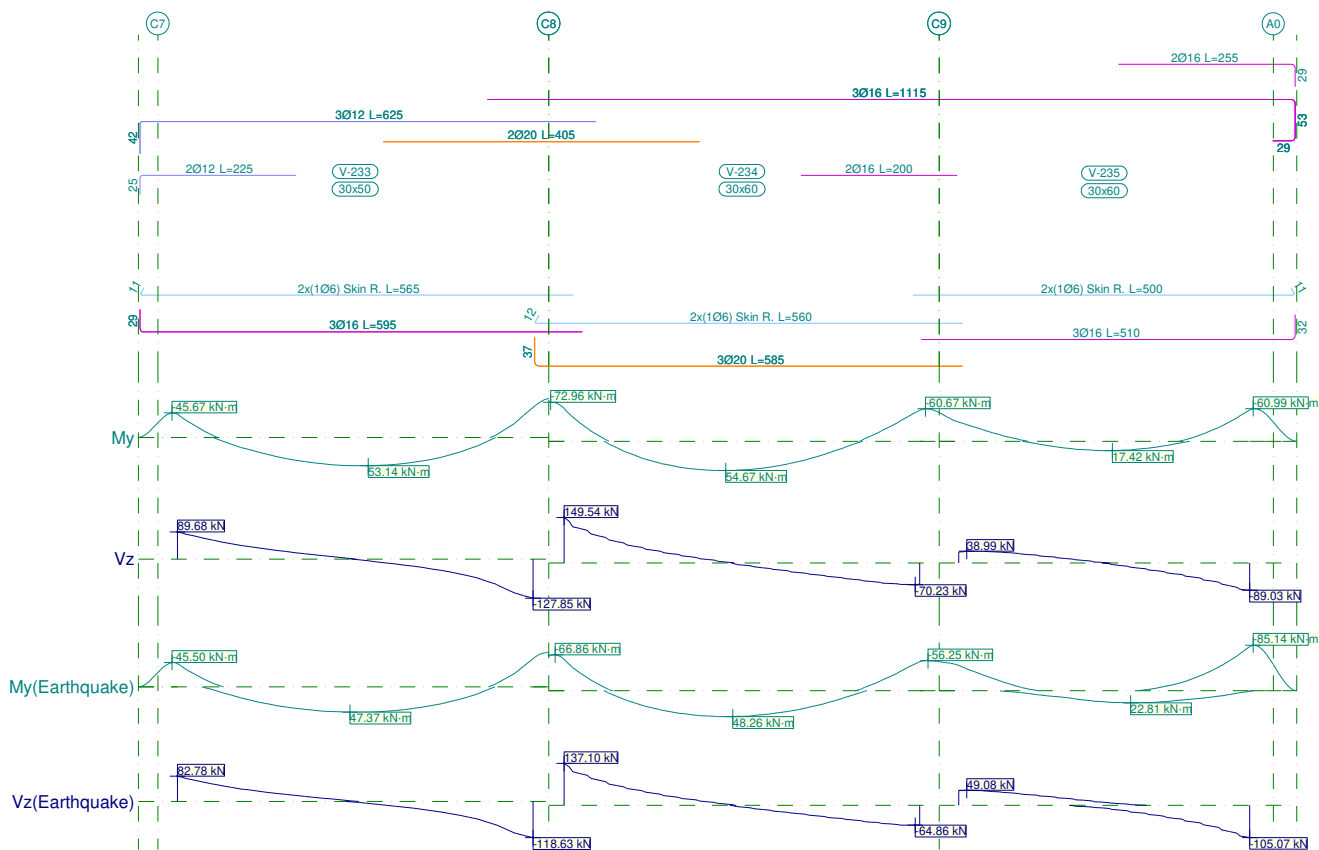
Frame 19			Span: V-232		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-3.87	--	--
	x	[m]	0.00	--	--
	Max Moment	[kN·m]	3.23	4.16	3.72
	x	[m]	0.41	0.75	0.99
	Min Shear	[kN]	--	-2.24	-6.97
	x	[m]	--	0.89	1.35
	Max Shear	[kN]	24.59	7.46	--
	x	[m]	0.00	0.47	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	6.35	3.81	3.15
	x	[m]	0.05	0.52	0.99



Beam reinforcement report

Frame 19				Span: V-232		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-19.41	-5.25	--
		[m]		0.00	0.47	--
	Max Moment x	[kN·m]		15.76	10.25	5.66
		[m]		0.00	0.47	0.99
	Min Shear x	[kN]		-14.97	-10.41	-11.36
		[m]		0.05	0.52	1.22
	Max Shear x	[kN]		48.46	19.85	5.94
		[m]		0.00	0.47	0.99
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		7.49	4.20	3.23	
	[m]		0.05	0.52	0.99	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.35 m)		

2.20.- Frame 20





Beam reinforcement report

Frame 20				Span: V-233			Span: V-234			Span: V-235		
Section				30x50			30x60			30x60		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment. x	[kN·m]		-43.37	--	-56.08	-61.49	--	-57.99	-35.92	--	-58.55
		[m]		0.00	--	4.55	0.00	--	4.55	0.00	--	3.72
	Max Moment x	[kN·m]		42.81	53.14	44.07	49.00	54.67	34.59	9.87	17.42	10.63
		[m]		1.51	2.44	3.14	1.51	2.07	3.09	1.23	1.97	2.53
	Min Shear x	[kN]		--	-23.19	-127.85	--	-30.53	-70.23	--	-22.46	-89.03
		[m]		--	3.03	4.55	--	3.00	4.49	--	2.43	3.72
	Max Shear x	[kN]		89.68	18.43	--	149.54	21.34	--	38.99	18.71	--
		[m]		0.00	1.63	--	0.00	1.60	--	0.10	1.25	--
	Min Torsion x	[kN]		--	--	-5.88	-8.18	-6.31	-4.79	-4.65	-6.32	-13.96
		[m]		--	--	4.31	0.53	1.69	3.09	1.23	2.39	3.56
	Max Torsion x	[kN]		--	--	--	21.62	23.30	2.69	2.48	--	--
		[m]		--	--	--	0.00	1.60	3.09	0.00	--	--
Seismic situations	Min Moment. x	[kN·m]		-43.57	--	-52.88	-58.72	--	-54.48	-47.58	-2.76	-82.46
		[m]		0.00	--	4.55	0.00	--	4.55	0.00	2.43	3.72
	Max Moment x	[kN·m]		40.21	47.37	37.68	42.60	48.26	32.32	10.56	22.81	21.17
		[m]		1.51	2.21	3.14	1.51	2.16	3.09	1.23	2.20	2.53
	Min Shear x	[kN]		--	-22.19	-118.63	--	-27.23	-64.86	--	-29.88	-105.07
		[m]		--	3.03	4.55	--	3.00	4.49	--	2.43	3.72
	Max Shear x	[kN]		82.78	16.91	--	137.10	20.28	--	49.08	26.16	--
		[m]		0.00	1.63	--	0.00	1.60	--	0.10	1.25	--
	Min Torsion x	[kN]		--	--	-5.23	-7.26	-5.43	-4.03	-4.00	-5.75	-12.76
		[m]		--	--	4.31	0.53	1.69	3.09	1.23	2.39	3.60
	Max Torsion x	[kN]		--	--	--	19.20	22.97	2.48	2.33	--	--
		[m]		--	--	--	0.00	1.60	3.09	0.00	--	--
Top Reinf. Area		[cm²]	Real	5.66	5.98	14.28	14.72	6.91	10.06	6.03	8.11	10.06
			Req.	4.58	3.93	7.46	7.38	4.71	6.77	5.54	5.54	7.95
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	9.43	9.43	9.43	6.03	6.03	6.03
			Req.	4.56	4.56	7.14	7.36	6.49	6.27	5.54	5.54	5.54
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	4.72	8.09	2.83	2.83	4.04	4.04	4.04
			Req.	2.45	2.45	3.77	7.13	2.45	2.45	2.45	2.45	3.71
Active Defl.				1.02 mm, L/4459 (L: 4.55 m)			0.52 mm, L/8779 (L: 4.55 m)			0.02 mm, L/39716 (L: 0.90 m)		

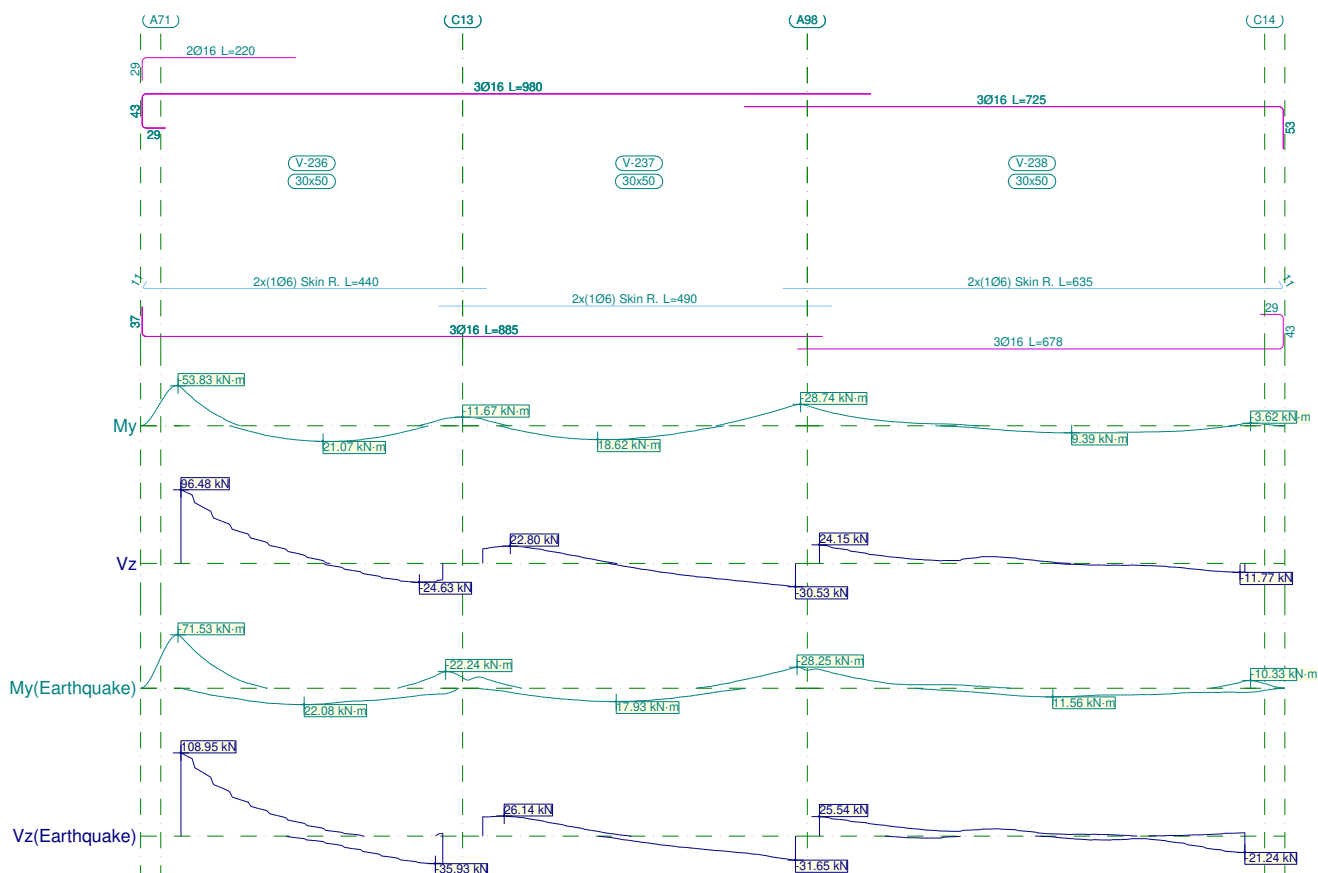


Beam reinforcement report

edificio 2.0

Date: 11/20/20

2.21.- Frame 21



Frame 21			Span: V-236			Span: V-237			Span: V-238		
Section			30x50			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-51.6	--	-9.16	-9.10	--	-27.9	-22.0	-1.6	-3.19
		x	1	--	3	6	--	7	1	1	7
	Max Moment	[kN·m]	13.06	21.0	18.7	18.0	18.6	7.45	--	9.39	8.90
		x	1.07	1.77	2.24	1.28	1.43	2.60	--	3.14	3.61
	Min Shear	[kN]	--	-9.20	-24.6	--	-15.3	-30.5	--	-2.1	-11.7
		x	--	2.14	2.97	--	2.52	3.90	--	3.52	5.24
	Max Shear	[kN]	96.48	25.6	--	22.8	5.71	--	24.1	8.80	--
		x	0.00	1.09	--	0.34	1.35	--	0.00	2.21	--
	Min Torsion	[kN]	-1.51	-1.68	-1.90	-4.21	-1.87	--	--	-2.7	-4.36
		x	0.87	1.81	3.21	0.00	1.35	--	--	3.38	5.24
	Max Torsion	[kN]	11.87	6.48	4.87	2.51	2.39	1.78	2.10	1.51	--
		x	0.14	1.09	2.24	0.97	1.43	2.60	0.00	2.49	--

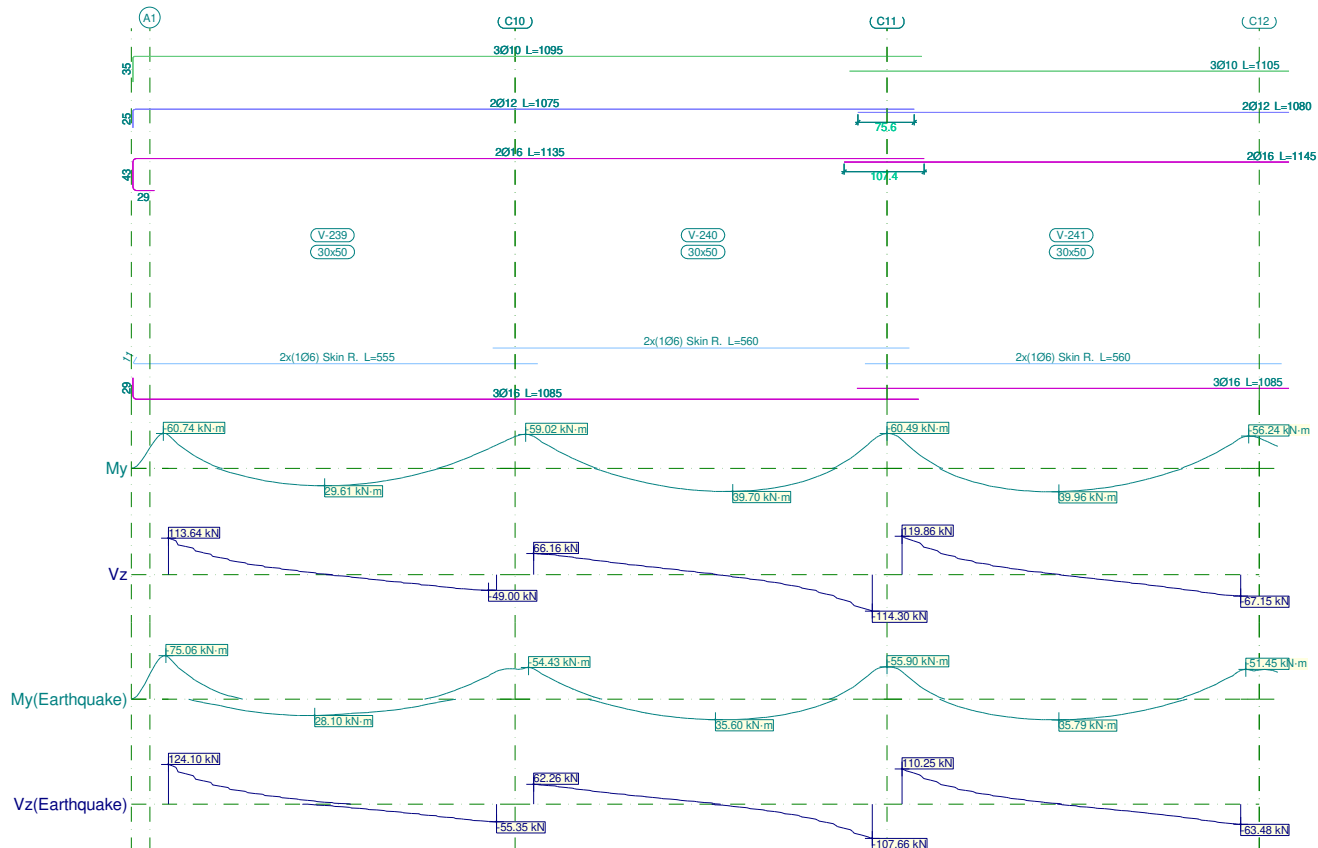


Beam reinforcement report

Frame 21				Span: V-236			Span: V-237			Span: V-238		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-69.18	--	-21.41	-14.56	--	-27.95	-25.24	-4.25	-9.76
		x	[m]	0.00	--	3.27	0.00	--	3.90	0.00	1.77	5.30
	Max Moment	[kN·m]		20.00	22.08	17.23	16.63	17.93	10.25	3.82	11.56	9.12
		x	[m]	1.07	1.54	2.24	1.28	1.67	2.60	1.74	2.91	3.61
	Min Shear	[kN]		--	-16.32	-35.93	--	-14.84	-31.65	-2.77	-5.07	-21.24
		x	[m]	--	2.14	3.17	--	2.52	3.90	1.28	3.52	5.30
	Max Shear	[kN]		108.95	31.48	3.79	26.14	7.59	--	25.54	9.53	4.49
		x	[m]	0.00	1.09	3.27	0.27	1.35	--	0.00	2.21	5.30
	Min Torsion	[kN]		-1.50	-1.62	-2.12	-4.17	-1.81	-1.42	--	-2.74	-3.98
		x	[m]	0.87	1.81	3.21	0.00	1.43	3.84	--	3.38	4.54
	Max Torsion	[kN]		11.06	6.03	4.49	2.46	2.34	1.68	2.18	1.54	--
		x	[m]	0.14	1.09	2.24	0.97	1.43	2.60	0.00	2.96	--
Top Reinf. Area		[cm²]	Real	10.06	7.85	6.03	6.03	6.03	11.10	11.13	6.03	6.03
			Req.	7.36	4.56	4.56	4.56	4.56	4.56	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	5.03	4.56	4.56	4.56	4.56	5.55	5.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	4.35	4.35	4.35	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	3.88	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.17 mm, L/19057 (L: 3.17 m)			0.23 mm, L/16161 (L: 3.69 m)			0.05 mm, L/29676 (L: 1.42 m)		



2.22.- Frame 22



Frame 22			Span: V-239			Span: V-240			Span: V-241		
Section			30x50			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-57.9	--	-40.8	-55.5	--	-48.28	-49.6	--	-52.6
			9		6	1			5		7
	x	[m]	0.00	--	4.41	0.00	--	4.55	0.00	--	4.55
	Max Moment	[kN·m]	23.11	29.6	18.4	24.4	39.7	35.84	35.73	39.9	26.1
				1	8	8	0			6	0
	x	[m]	1.40	2.10	3.03	1.51	2.68	3.09	1.46	2.11	3.04
	Min Shear	[kN]	--	-20.2	-49.0	--	-16.3	-114.3	--	-22.5	-67.1
				9	0		3	0		1	5
	x	[m]	--	2.93	4.30	--	3.00	4.55	--	2.95	4.55
	Max Shear	[kN]	113.6	19.4	--	66.1	23.3	--	119.8	16.3	--
			4	6		6	4		6	6	
	x	[m]	0.00	1.50	--	0.00	1.60	--	0.00	1.55	--
	Min Torsion	[kN]	-7.37	-5.96	-5.05	-2.05	-2.21	-4.77	-2.81	--	--
	x	[m]	0.57	1.50	3.13	0.00	2.91	4.31	0.06	--	--
	Max Torsion	[kN]	11.67	--	--	4.42	5.76	9.38	11.51	16.48	5.10
	x	[m]	0.00	--	--	1.46	2.86	4.26	0.00	1.64	3.04

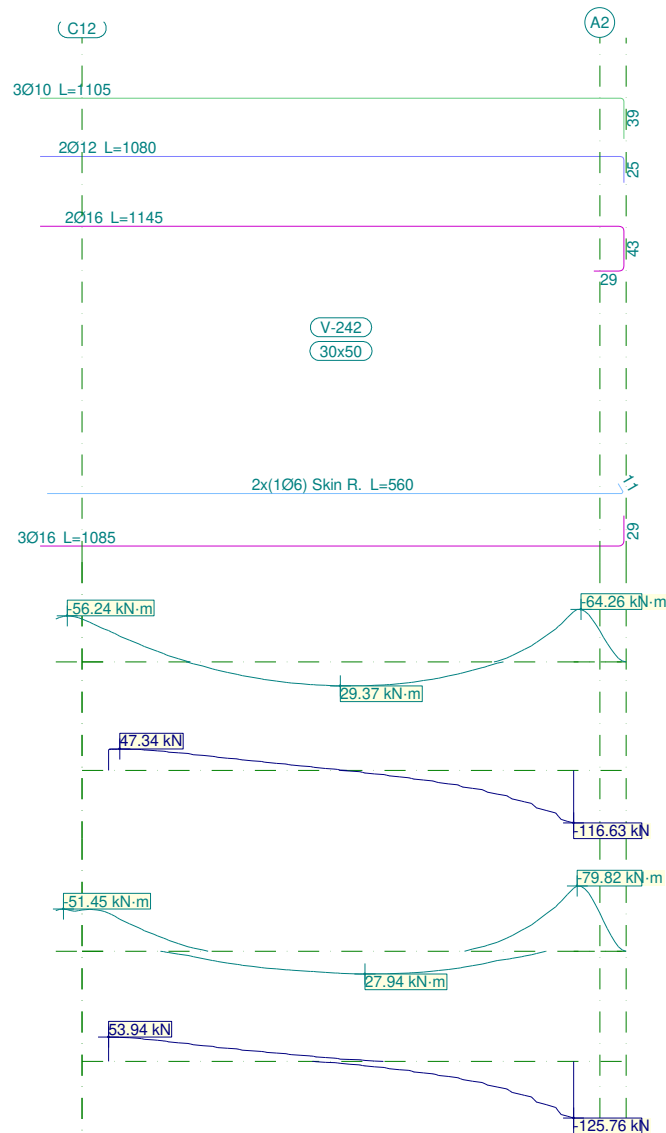


Beam reinforcement report

Frame 22				Span: V-239			Span: V-240			Span: V-241		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-72.30	--	-47.85	-52.39	--	-47.13	-47.52	--	-49.47
		[m]		0.00	--	4.41	0.00	--	4.55	0.00	--	4.55
	Max Moment	[kN·m]		25.57	28.10	18.60	23.89	35.60	31.71	31.21	35.79	24.58
		[m]		1.40	1.97	3.03	1.51	2.44	3.09	1.46	2.11	3.04
	Min Shear	[kN]		--	-22.12	-55.35	--	-16.03	-107.66	--	-19.84	-63.48
		[m]		--	2.93	4.41	--	3.00	4.55	--	2.95	4.55
	Max Shear	[kN]		124.10	122.80	--	62.26	20.88	--	110.25	115.80	--
		[m]		0.00	1.50	--	0.00	1.60	--	0.00	1.55	--
	Min Torsion	[kN]		-7.37	-5.53	-4.48	-2.17	-2.01	-4.18	-2.77	--	--
		[m]		0.33	1.50	3.13	0.00	2.91	4.31	0.06	--	--
	Max Torsion	[kN]		10.42	--	--	3.91	5.14	8.62	10.21	15.78	4.60
		[m]		0.00	--	--	1.46	2.86	4.26	0.00	1.69	3.04
Top Reinf. Area		[cm²]	Real	8.64	8.64	8.64	8.64	8.64	10.18	9.98	8.64	8.64
			Req.	7.56	3.19	6.39	6.61	3.19	6.71	6.71	3.19	6.44
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	8.17	8.38	6.03	6.03
			Req.	4.82	4.89	4.66	5.19	5.48	5.48	5.49	5.50	5.25
Transv. Reinf. Area		[cm²/m]	Real	5.66	5.66	5.66	3.77	3.77	3.77	6.29	6.29	6.29
			Req.	5.22	2.45	2.45	2.45	2.45	3.39	5.33	2.45	2.45
Active Defl.				0.33 mm, L/13235 (L: 4.31 m)			0.58 mm, L/7803 (L: 4.55 m)			0.61 mm, L/7461 (L: 4.55 m)		



Beam reinforcement report



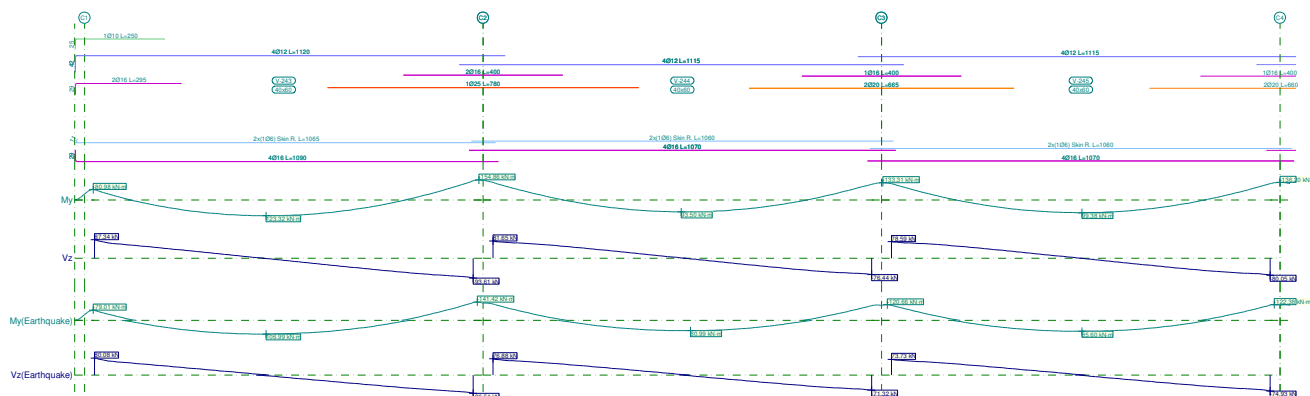
Frame 22			Span: V-242		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-38.26	--	-61.55
	x	[m]	0.00	--	4.43
	Max Moment	[kN·m]	20.79	29.37	22.82
	x	[m]	1.46	2.21	3.00
	Min Shear	[kN]	--	-19.49	-116.63
	x	[m]	--	2.91	4.43
	Max Shear	[kN]	47.34	18.42	--
	x	[m]	0.11	1.48	--
	Min Torsion	[kN]	--	-1.96	-11.59
	x	[m]	--	2.91	4.31
	Max Torsion	[kN]	4.42	4.96	6.05
	x	[m]	1.46	2.86	3.79



Beam reinforcement report

Frame 22				Span: V-242		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-46.61	--	-77.08
		[m]		0.00	--	4.43
	Max Moment x	[kN·m]		20.04	27.94	25.44
		[m]		1.46	2.44	3.00
	Min Shear x	[kN]		--	-23.29	-125.76
		[m]		--	2.91	4.43
	Max Shear x	[kN]		53.94	20.87	--
		[m]		0.00	1.48	--
	Min Torsion x	[kN]		-1.39	-1.85	-10.48
		[m]		0.00	2.91	4.31
Max Torsion x	[kN]		4.07	4.68	6.39	
	[m]		0.81	2.86	4.02	
Top Reinf. Area		[cm²]	Real	8.64	8.64	8.64
			Req.	6.22	3.19	7.87
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.78	4.88	4.80
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	5.92
			Req.	2.45	2.45	5.50
Active Defl.				0.33 mm, L/13083 (L: 4.35 m)		

2.23.- Frame 23



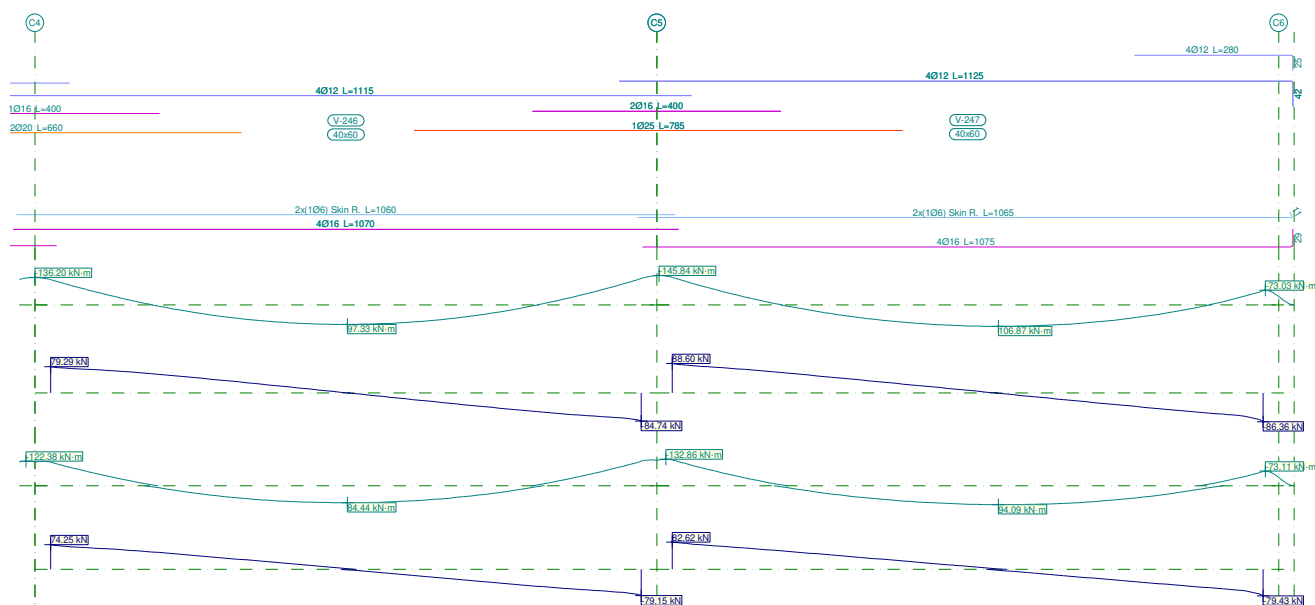


Beam reinforcement report

Frame 23				Span: V-243			Span: V-244			Span: V-245		
Section				40x60			40x60			40x60		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment. x	[kN·m]		-79.45	--	-148.13	-135.67	--	-121.87	-125.06	--	-126.58
		[m]		0.00	--	9.50	0.00	--	9.50	0.00	--	9.50
	Max Moment x	[kN·m]		109.07	123.32	79.38	64.00	93.50	69.74	73.35	99.38	71.39
		[m]		3.14	4.31	6.41	3.09	4.73	6.36	3.14	4.78	6.41
	Min Shear x	[kN]		--	-39.25	-93.61	--	-27.25	-76.44	--	-29.47	-80.05
		[m]		--	6.29	9.50	--	6.24	9.50	--	6.29	9.50
	Max Shear x	[kN]		87.34	18.61	--	81.65	30.37	--	78.59	28.23	--
		[m]		0.00	3.26	--	0.00	3.21	--	0.00	3.26	--
	Min Torsion x	[kN]		-16.20	--	--	-11.12	--	--	-10.62	--	--
		[m]		0.00	--	--	0.00	--	--	0.00	--	--
	Max Torsion x	[kN]		--	--	11.53	--	--	9.60	--	--	11.98
		[m]		--	--	9.44	--	--	9.39	--	--	9.44
Seismic situations	Min Moment. x	[kN·m]		-77.68	--	-137.71	-126.17	--	-114.02	-116.88	--	-118.24
		[m]		0.00	--	9.50	0.00	--	9.50	0.00	--	9.50
	Max Moment x	[kN·m]		97.01	106.99	69.89	57.41	80.99	62.48	65.31	85.60	63.65
		[m]		3.14	4.31	6.41	3.09	4.96	6.36	3.14	4.78	6.41
	Min Shear x	[kN]		--	-35.83	-86.54	--	-25.10	-71.32	--	-27.03	-74.93
		[m]		--	6.29	9.50	--	6.24	9.50	--	6.29	9.50
	Max Shear x	[kN]		80.08	17.88	--	76.88	27.90	--	73.73	25.92	--
		[m]		0.00	3.26	--	0.00	3.21	--	0.00	3.26	--
	Min Torsion x	[kN]		-13.96	--	--	-9.98	--	--	-9.14	--	--
		[m]		0.00	--	--	0.00	--	--	0.00	--	--
	Max Torsion x	[kN]		--	--	9.98	--	--	8.62	--	--	10.43
		[m]		--	--	9.44	--	--	9.39	--	--	9.44
Top Reinf. Area		[cm ²]	Real	9.33	6.00	16.18	15.87	6.00	15.54	15.26	4.52	15.54
			Req.	8.87	4.49	12.53	12.43	4.49	11.45	11.46	4.34	11.60
Bot. Reinf. Area		[cm ²]	Real	8.04	8.04	9.43	9.87	8.04	9.43	9.43	8.04	9.43
			Req.	7.54	7.55	8.09	7.94	7.38	7.77	7.63	7.38	7.77
Transv. Reinf. Area		[cm ² /m]	Real	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26
Active Defl.				3.44 mm, L/2765 (L: 9.50 m)			2.14 mm, L/4300 (L: 9.21 m)			2.43 mm, L/3908 (L: 9.50 m)		



Beam reinforcement report



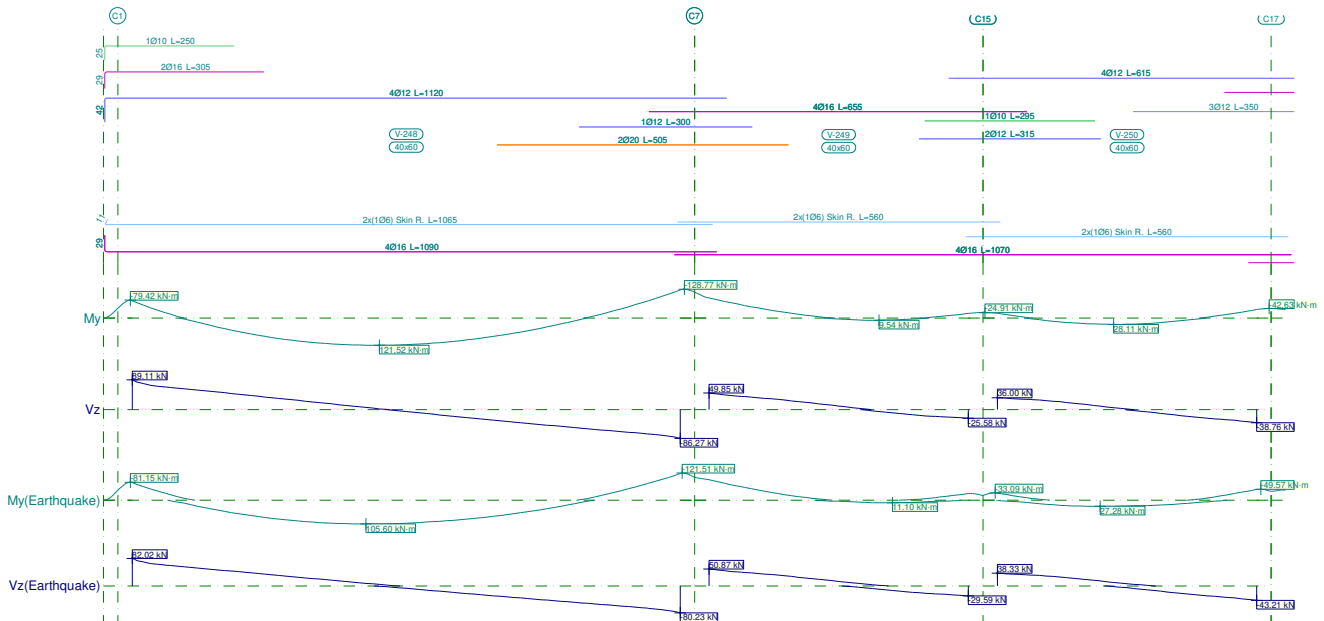
Frame 23				Span: V-246			Span: V-247		
Section				40x60			40x60		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-125.91	--	-132.16	-137.16	--	-71.41
	x	[m]		0.00	--	9.50	0.00	--	9.50
	Max Moment	[kN·m]		71.59	97.33	69.20	68.21	106.87	95.21
	x	[m]		3.14	4.78	6.41	3.14	5.24	6.41
	Min Shear	[kN]		--	-28.25	-84.74	--	-19.61	-86.36
	x	[m]		--	6.29	9.50	--	6.29	9.50
	Max Shear	[kN]		79.29	29.35	--	88.60	35.33	--
	x	[m]		0.00	3.26	--	0.00	3.26	--
	Min Torsion	[kN]		-9.60	--	--	-5.62	--	--
	x	[m]		0.00	--	--	0.00	--	--
Seismic situations	Max Torsion	[kN]		--	--	12.59	--	--	17.79
	x	[m]		--	--	9.44	--	--	9.44
	Min Moment.	[kN·m]		-117.37	--	-123.00	-128.64	--	-71.72
	x	[m]		0.00	--	9.50	0.00	--	9.50
	Max Moment	[kN·m]		64.01	84.44	61.63	60.87	94.09	85.88
	x	[m]		3.14	4.78	6.41	3.14	5.24	6.41
	Min Shear	[kN]		--	-26.06	-79.15	--	-18.78	-79.43
	x	[m]		--	6.29	9.50	--	6.29	9.50
	Max Shear	[kN]		74.25	26.82	--	82.62	32.49	--
	x	[m]		0.00	3.26	--	0.00	3.26	--
Top Reinf. Area	Min Torsion	[kN]		-8.42	--	--	-5.59	--	--
	x	[m]		0.00	--	--	0.00	--	--
Bot. Reinf. Area	Max Torsion	[kN]		--	--	10.99	--	--	17.14
	x	[m]		--	--	9.44	--	--	9.44
Top Reinf. Area			Real	15.26	6.00	16.27	15.89	6.00	9.05
			Req.	11.60	4.49	12.06	7.53	4.49	8.49
Bot. Reinf. Area			Real	9.43	8.04	8.04	8.04	8.04	8.04
			Req.	7.63	7.38	8.13	7.95	7.38	7.38



Beam reinforcement report

Frame 23			Span: V-246			Span: V-247		
Section			40x60			40x60		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Transv. Reinf. Area	[cm²/m]	Real	3.33	3.33	3.33	3.33	3.33	3.77
		Req.	3.26	3.26	3.26	3.26	3.26	3.39
Active Defl.			2.34 mm, L/4041 (L: 9.47 m)			2.94 mm, L/3235 (L: 9.50 m)		

2.24.- Frame 24



Frame 24			Span: V-248			Span: V-249			Span: V-250		
Section			40x60			40x60			40x60		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-77.8	--	-125.8	-89.6	-16.6	-20.9	-21.1	--	-38.2
			1	--	2	8	8	3	3	--	3
	x	[m]	0.00	--	9.50	0.00	1.55	4.50	0.00	--	4.50
	Max Moment	[kN·m]	108.5	121.5	77.47	--	9.54	9.00	23.4	28.1	14.8
			0	2		--			5	1	2
	x	[m]	3.12	4.28	6.38	--	2.95	3.07	1.43	2.02	3.07
	Min Shear	[kN]	--	-31.2	-86.27	--	-5.24	-25.5	--	-13.3	-38.7
			--	6		--		8	--	0	6
	x	[m]	--	6.27	9.50	--	2.95	4.50	--	2.95	4.50
	Max Shear	[kN]	89.1	121.18	--	49.8	24.3	--	36.0	15.1	--
			5		--	6		--	0	1	--
	x	[m]	0.00	3.23	--	0.00	1.55	--	0.00	1.55	--
	Min Torsion	[kN]	--	-2.68	-8.81	--	--	-8.42	--	-3.97	-8.63
			--			--	--		--		
	x	[m]	--	6.15	9.42	--	--	4.35	--	2.95	4.35
	Max Torsion	[kN]	17.22	--	--	9.41	4.30	--	8.47	--	--
	x	[m]	0.00	--	--	0.00	1.55	--	0.00	--	--



Beam reinforcement report

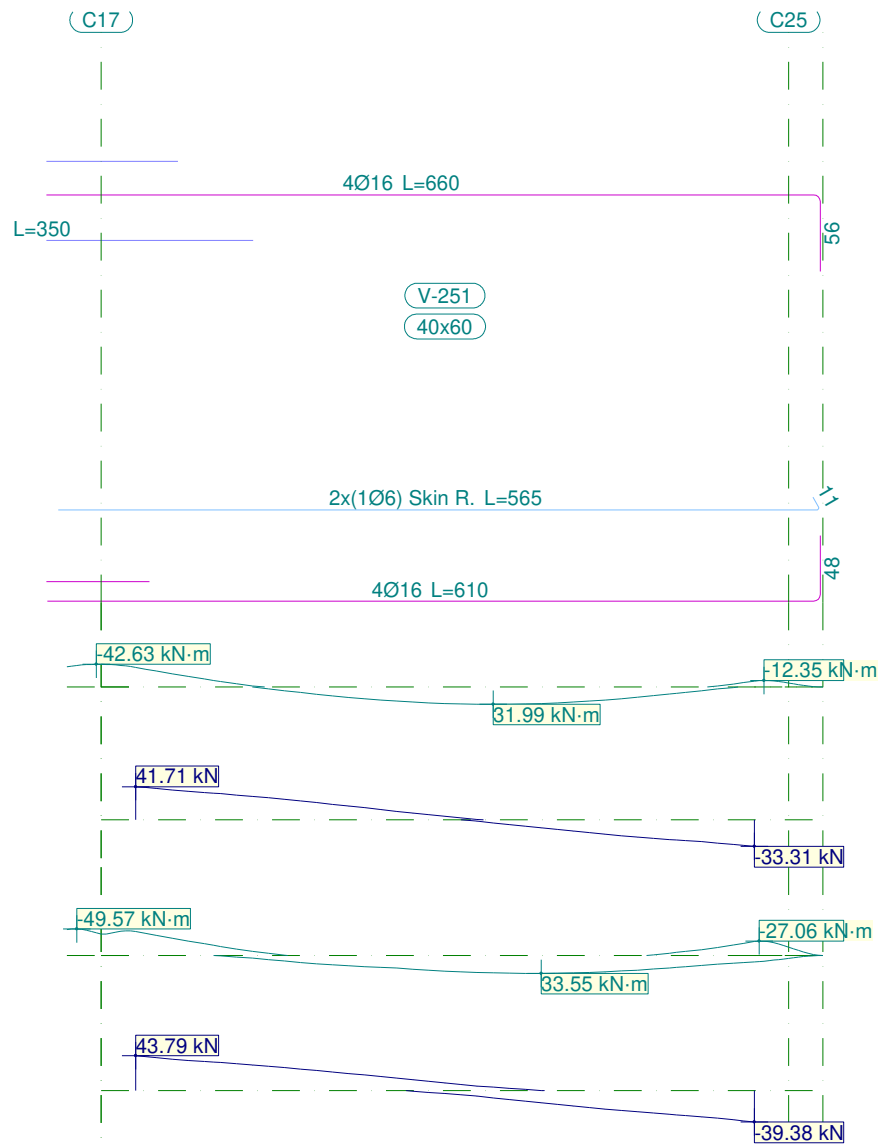
Frame 24				Span: V-248			Span: V-249			Span: V-250		
Section				40x60			40x60			40x60		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-79.79	--	-119.73	-91.69	-16.58	-30.33	-32.26	--	-48.56
		x		[m]	0.00	--	9.50	0.00	1.55	4.50	0.00	--
	Max Moment	[kN·m]		97.10	105.60	67.73	--	10.98	11.10	25.78	27.28	17.60
		x		[m]	3.12	4.05	6.38	--	2.95	3.18	1.43	1.78
	Min Shear	[kN]		--	-29.34	-80.23	--	-9.59	-29.59	--	-17.93	-43.21
		x		[m]	--	6.27	9.50	--	2.95	4.50	--	2.95
	Max Shear	[kN]		82.02	220.55	--	50.87	26.25	0.53	38.33	18.94	--
		x		[m]	0.00	3.23	--	0.00	1.55	3.07	0.00	1.55
	Min Torsion	[kN]		--	-2.33	-7.48	--	--	-8.11	--	-3.80	-8.37
		x		[m]	--	6.15	9.42	--	--	4.35	--	2.95
	Max Torsion	[kN]		14.65	--	--	9.09	3.94	--	8.25	--	--
		x		[m]	0.00	--	--	0.00	1.55	--	0.00	--
Top Reinf. Area		[cm²]	Real	9.33	4.52	17.68	17.87	8.04	13.81	12.94	7.92	13.89
			Req.	8.88	5.00	11.24	10.62	7.38	7.39	7.41	7.41	7.41
Bot. Reinf. Area		[cm²]	Real	8.04	8.04	9.43	9.87	8.04	8.04	8.04	8.04	10.03
			Req.	7.47	7.55	8.84	8.94	7.38	7.38	7.38	7.38	7.38
Transv. Reinf. Area		[cm²/m]	Real	3.54	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	3.28	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26
Active Defl.				3.26 mm, L/2913 (L: 9.50 m)			1.07 mm, L/8407 (L: 9.00 m)			0.17 mm, L/26488 (L: 4.43 m)		



Beam reinforcement report

edificio 2.0

Date: 11/20/20



Frame 24			Span: V-251		
Section			40x60		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-36.95	--	-11.34
	x	[m]	0.00	--	4.50
	Max Moment	[kN·m]	16.56	31.99	29.45
	x	[m]	1.43	2.60	3.07
	Min Shear	[kN]	--	-9.72	-33.31
	x	[m]	--	2.95	4.50
	Max Shear	[kN]	41.71	17.47	--
	x	[m]	0.00	1.55	--
	Min Torsion	[kN]	--	--	-9.66
	x	[m]	--	--	4.35
	Max Torsion	[kN]	5.90	2.49	--
	x	[m]	0.00	1.55	--

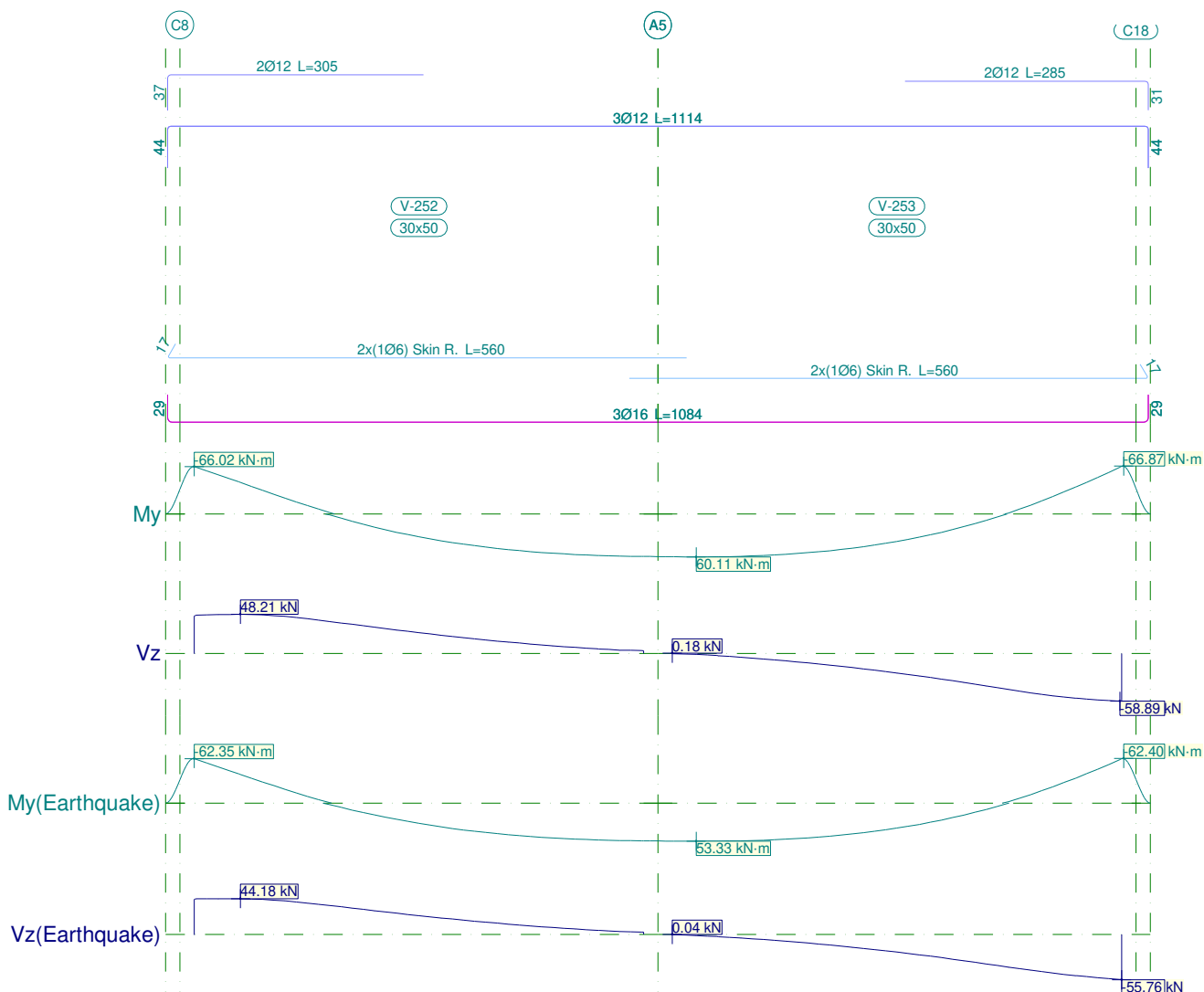


Beam reinforcement report

Frame 24				Span: V-251		
Section				40x60		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-44.77	--	-26.23
		[m]		0.00	--	4.50
	Max Moment x	[kN·m]		17.58	33.55	33.16
		[m]		1.43	2.95	3.07
	Min Shear x	[kN]		--	-15.18	-39.38
		[m]		--	2.95	4.50
	Max Shear x	[kN]		43.79	21.59	--
		[m]		0.00	1.55	--
	Min Torsion x	[kN]		--	--	-9.33
		[m]		--	--	4.35
Max Torsion x	[kN]		5.95	2.39	--	
	[m]		0.00	1.55	--	
Top Reinf. Area		[cm²]	Real	13.87	8.04	8.04
			Req.	7.39	4.02	7.38
Bot. Reinf. Area		[cm²]	Real	9.43	8.04	8.04
			Req.	7.38	7.38	7.38
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	3.26	3.26	3.26
Active Defl.				0.26 mm, L/17053 (L: 4.50 m)		



2.25.- Frame 25



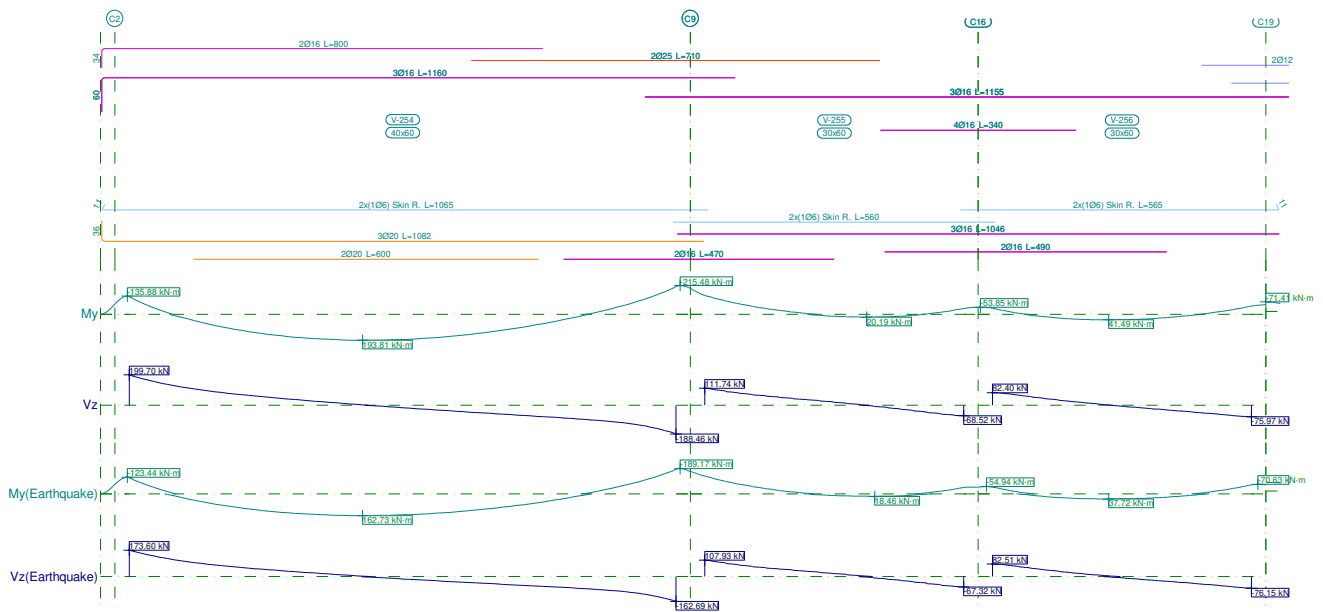
Frame 25			Span: V-252			Span: V-253		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-66.02	--	--	--	--	-66.76
		[m]	0.00	--	--	--	--	4.70
	Max Moment	[kN·m]	5.95	46.40	59.38	60.11	51.39	13.39
		[m]	1.53	3.05	4.70	0.25	1.65	3.17
	Min Shear	[kN]	--	--	--	-13.10	-35.76	-58.89
		[m]	--	--	--	1.53	3.05	4.68
	Max Shear	[kN]	48.21	35.80	15.23	0.18	--	--
		[m]	0.48	1.65	3.17	0.00	--	--
	Min Torsion	[kN]	-1.47	--	--	--	--	--
		[m]	0.00	--	--	--	--	--
	Max Torsion	[kN]	--	--	--	--	--	--
		[m]	--	--	--	--	--	--



Beam reinforcement report

Frame 25				Span: V-252			Span: V-253		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-62.35	--	--	--	--	-62.28
	x	[m]		0.00	--	--	--	--	4.70
	Max Moment	[kN·m]		5.91	41.11	52.62	53.33	46.08	12.82
	x	[m]		1.53	3.05	4.70	0.25	1.65	3.17
	Min Shear	[kN]		--	--	--	-11.74	-32.26	-55.76
	x	[m]		--	--	--	1.53	3.05	4.70
	Max Shear	[kN]		44.18	32.51	13.93	0.04	--	--
	x	[m]		0.48	1.65	3.17	0.00	--	--
	Min Torsion	[kN]		-1.67	--	--	--	--	--
	x	[m]		0.00	--	--	--	--	--
Max Torsion	[kN]		--	--	--	--	--	--	
x	[m]		--	--	--	--	--	--	
Top Reinf. Area		[cm²]	Real	5.66	5.66	3.39	3.39	5.66	5.66
			Req.	4.68	4.58	3.02	3.02	4.58	4.68
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	4.62	4.66	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46	2.46	2.46	2.46
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				6.68 mm, L/1453 (L: 9.70 m)			6.69 mm, L/1450 (L: 9.70 m)		

2.26.- Frame 26





Beam reinforcement report

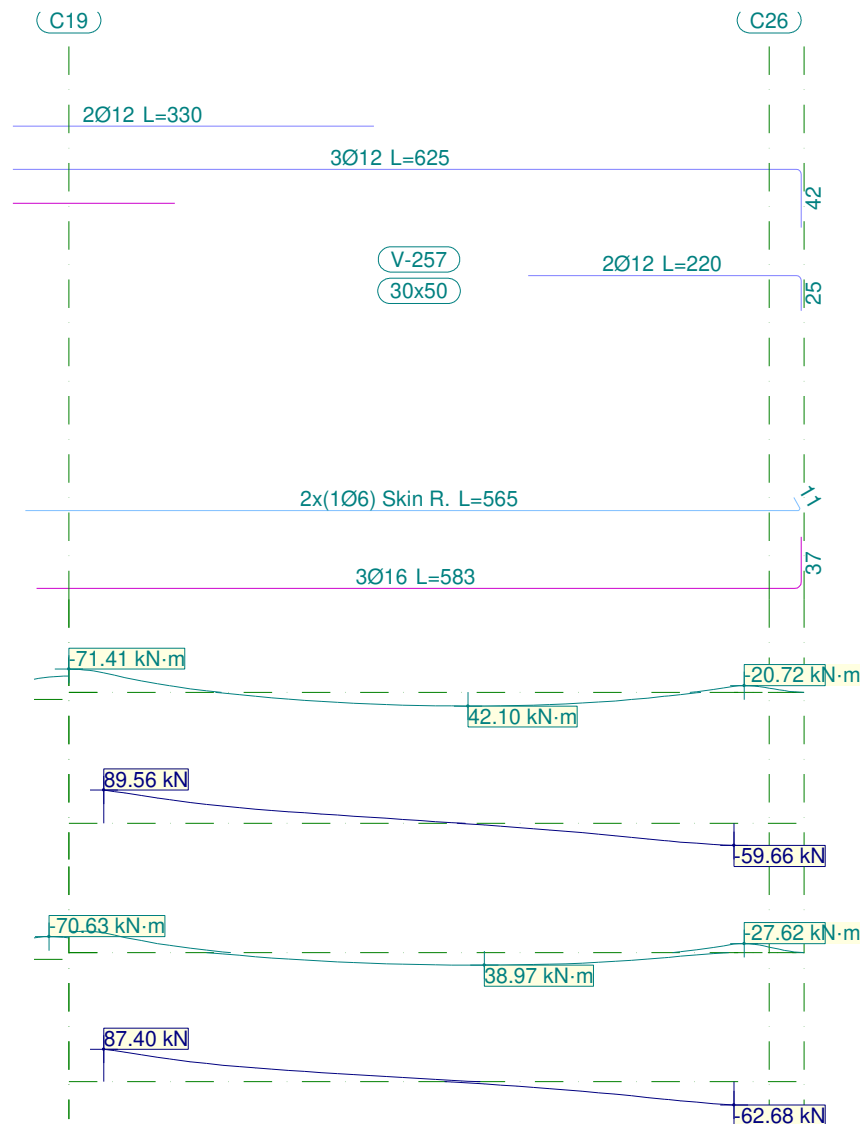
Frame 26				Span: V-254			Span: V-255			Span: V-256		
Section				40x60			30x60			30x60		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-131.65	--	-208.28	-142.01	-18.41	-43.37	-45.21	--	-61.99
		[m]		0.00	--	9.50	0.00	1.51	4.50	0.00	--	4.50
	Max Moment	[kN·m]		178.91	193.81	124.79	--	20.19	19.25	36.19	41.49	23.84
		[m]		3.12	4.05	6.38	--	2.81	3.05	1.48	2.02	3.04
	Min Shear	[kN]		--	-53.09	-188.46	--	-7.57	-68.52	--	-29.23	-75.97
		[m]		--	6.27	9.50	--	2.95	4.50	--	3.00	4.50
	Max Shear	[kN]		199.70	26.43	--	111.74	46.58	--	82.40	18.73	--
		[m]		0.00	3.23	--	0.00	1.51	--	0.00	1.55	--
	Min Torsion	[kN]		--	--	-1.65	-4.31	-5.23	-6.66	-2.30	--	--
		[m]		--	--	9.42	1.27	2.91	4.31	0.47	--	--
	Max Torsion	[kN]		--	--	--	--	--	--	5.47	3.80	3.51
		[m]		--	--	--	--	--	--	0.15	1.55	4.35
Seismic situations	Min Moment.	[kN·m]		-119.84	--	-183.65	-132.97	-15.18	-46.91	-50.88	--	-66.49
		[m]		0.00	--	9.50	0.00	1.51	4.50	0.00	--	4.50
	Max Moment	[kN·m]		152.25	162.73	105.58	--	18.46	18.00	34.42	37.72	24.33
		[m]		3.12	4.05	6.38	--	2.95	3.05	1.48	2.02	3.04
	Min Shear	[kN]		--	-45.95	-162.69	--	-9.23	-67.32	--	-29.57	-76.15
		[m]		--	6.27	9.50	--	2.95	4.50	--	3.00	4.50
	Max Shear	[kN]		173.60	23.10	--	107.93	43.98	--	82.51	20.23	--
		[m]		0.00	3.23	--	0.00	1.51	--	0.00	1.55	--
	Min Torsion	[kN]		--	--	-2.18	-4.15	-4.87	-6.54	-2.23	--	--
		[m]		--	--	9.42	1.32	2.91	4.31	0.47	--	--
	Max Torsion	[kN]		--	--	--	--	--	--	5.43	3.58	3.47
		[m]		--	--	--	--	--	--	0.15	1.55	4.35
Top Reinf. Area		[cm²]	Real	10.06	12.23	20.16	20.02	15.85	14.08	14.08	6.03	10.40
			Req.	7.86	7.86	10.62	13.52	6.36	6.43	6.49	5.03	5.54
Bot. Reinf. Area		[cm²]	Real	15.71	15.71	15.67	10.06	10.06	10.06	10.06	10.06	6.03
			Req.	9.22	9.43	10.08	10.01	7.93	7.04	7.04	5.85	5.54
Transv. Reinf. Area		[cm²/m]	Real	3.54	3.33	3.33	2.83	2.83	2.83	2.83	2.83	2.83
			Req.	3.26	3.26	3.26	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				9.47 mm, L/1003 (L: 9.50 m)			0.14 mm, L/13551 (L: 1.88 m)			0.35 mm, L/12395 (L: 4.40 m)		



Beam reinforcement report

edificio 2.0

Date: 11/20/20



Frame 26			Span: V-257		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-60.02	--	-18.62
	x	[m]	0.00	--	4.50
	Max Moment	[kN·m]	24.32	42.10	39.31
	x	[m]	1.43	2.60	3.07
	Min Shear	[kN]	--	-11.00	-59.66
	x	[m]	--	2.95	4.50
	Max Shear	[kN]	89.56	25.11	--
	x	[m]	0.00	1.55	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

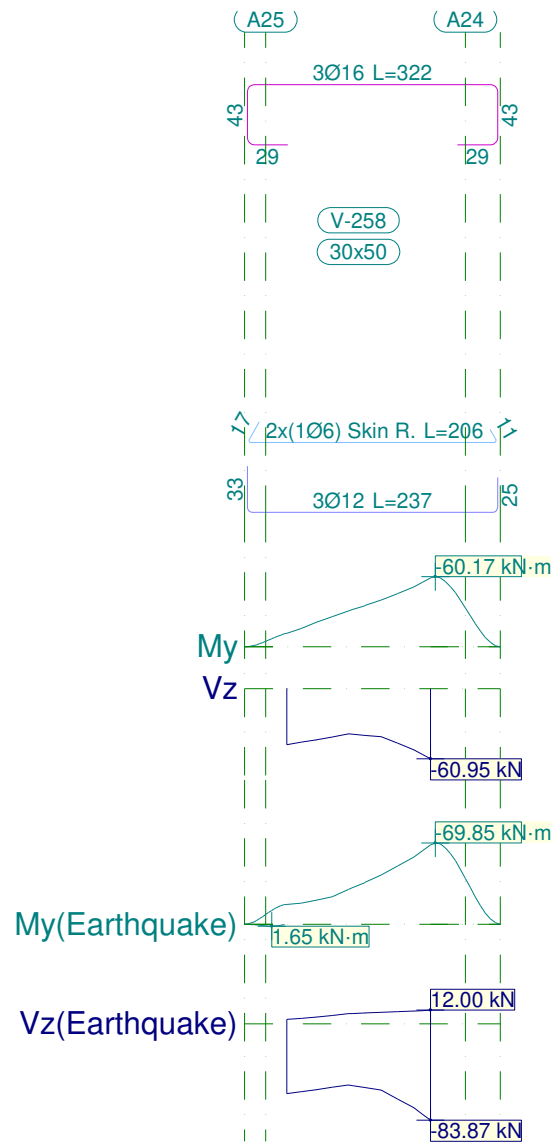


Beam reinforcement report

Frame 26				Span: V-257		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-60.48	--	-25.76
		[m]		0.00	--	4.50
	Max Moment x	[kN·m]		23.30	38.97	37.26
		[m]		1.43	2.72	3.07
	Min Shear x	[kN]		--	-12.20	-62.68
		[m]		--	2.95	4.50
	Max Shear x	[kN]		87.40	24.46	--
		[m]		0.00	1.55	--
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	9.68	4.89	5.66
			Req.	4.62	3.02	4.58
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.84	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.88 mm, L/5106 (L: 4.50 m)		



2.27.- Frame 27



Frame 27			Span: V-258		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-25.92	-40.10	-59.15
	x	[m]	0.33	0.68	1.03
	Max Moment	[kN·m]	--	--	--
	x	[m]	--	--	--
	Min Shear	[kN]	-48.55	-41.73	-60.95
	x	[m]	0.00	0.68	1.03
	Max Shear	[kN]	--	--	--
	x	[m]	--	--	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

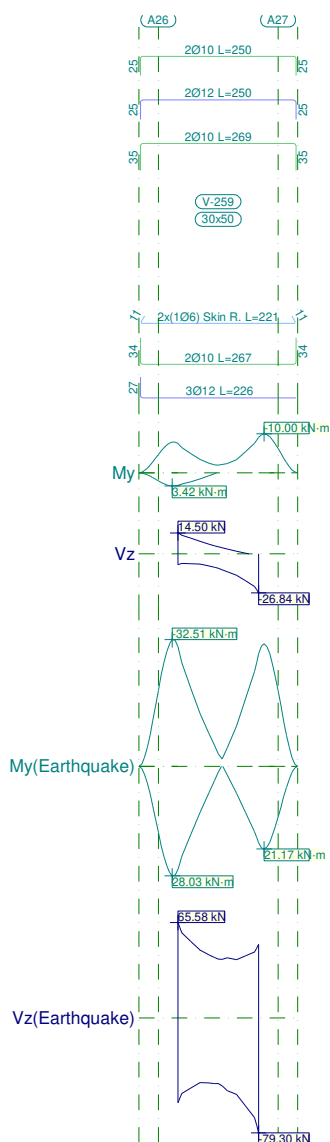


Beam reinforcement report

Frame 27				Span: V-258		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-23.62	-42.29	-68.27
		[m]		0.33	0.68	1.03
	Max Moment x	[kN·m]		--	--	--
		[m]		--	--	--
	Min Shear x	[kN]		-60.59	-57.59	-83.87
		[m]		0.00	0.68	1.03
	Max Shear x	[kN]		7.27	10.16	12.00
		[m]		0.33	0.68	1.03
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.66	4.66
Bot. Reinf. Area		[cm²]	Real	3.39	3.39	3.39
			Req.	3.02	3.02	3.02
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.10 mm, L/19646 (L: 2.05 m)		



2.28.- Frame 28



Frame 28			Span: V-259		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-7.55	-2.48	-9.09
	x	[m]	0.00	0.40	1.04
	Max Moment	[kN·m]	3.21	--	--
	x	[m]	0.00	--	--
	Min Shear	[kN]	-7.34	-12.22	-26.84
	x	[m]	0.00	0.63	1.04
	Max Shear	[kN]	14.50	6.63	1.88
	x	[m]	0.00	0.40	0.75
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

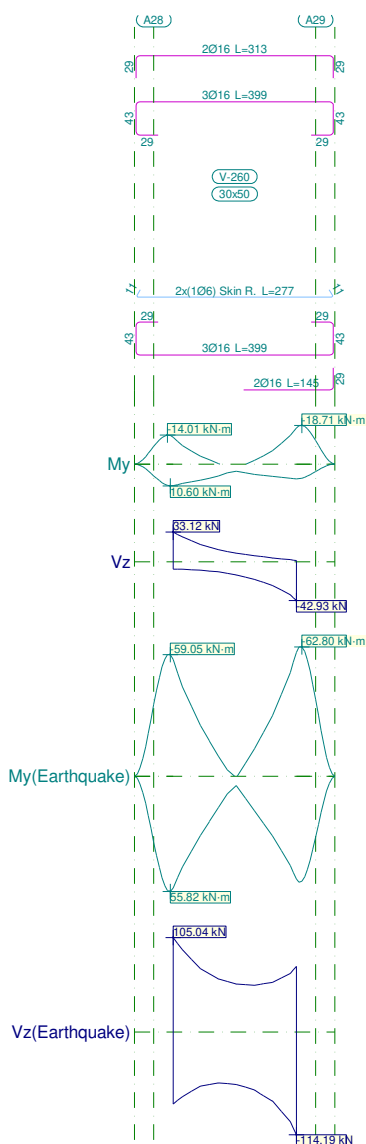


Beam reinforcement report

Frame 28				Span: V-259		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-30.77	-8.39	-28.89
		[m]		0.00	0.40	1.04
	Max Moment x	[kN·m]		26.43	6.66	19.62
		[m]		0.00	0.40	1.04
	Min Shear x	[kN]		-58.41	-50.11	-79.30
		[m]		0.00	0.63	1.04
	Max Shear x	[kN]		65.58	43.33	50.51
		[m]		0.00	0.40	1.04
	Min Torsion x	[kN]		-3.46	--	-1.38
		[m]		0.00	--	0.98
Max Torsion x	[kN]		2.02	--	2.80	
	[m]		0.00	--	0.98	
Top Reinf. Area		[cm²]	Real	5.40	5.40	5.40
			Req.	5.05	4.58	4.58
Bot. Reinf. Area		[cm²]	Real	4.96	4.96	4.96
			Req.	4.70	4.58	4.58
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.02 mm, L/91243 (L: 2.07 m)		



2.29.- Frame 29



Frame 29			Span: V-260		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-13.00	-1.72	-17.43
	x	[m]	0.00	1.05	1.60
	Max Moment	[kN·m]	10.50	5.74	7.16
	x	[m]	0.00	0.59	1.60
	Min Shear	[kN]	-10.05	-19.27	-42.93
	x	[m]	0.47	1.05	1.60
	Max Shear	[kN]	33.12	13.69	6.19
	x	[m]	0.00	0.59	1.13
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

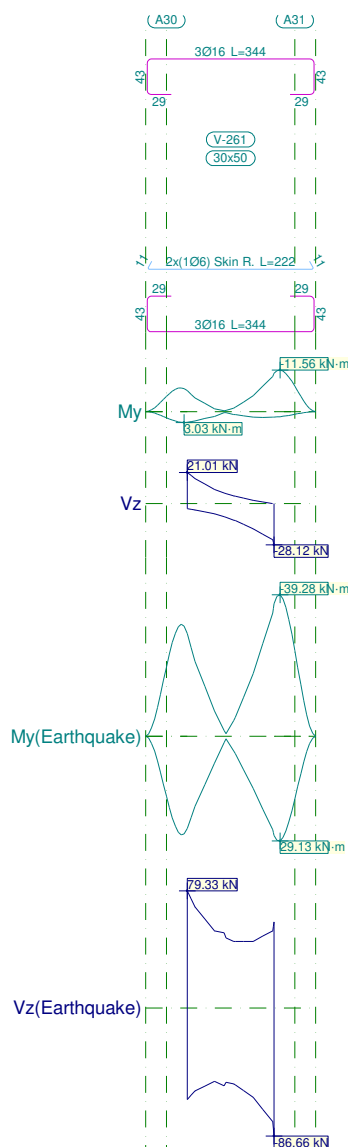


Beam reinforcement report

Frame 29				Span: V-260		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-56.65	-13.43	-60.14
	x	[m]		0.00	1.05	1.60
	Max Moment	[kN·m]		54.15	16.78	49.87
	x	[m]		0.00	1.05	1.60
	Min Shear	[kN]		-79.96	-64.51	-114.19
	x	[m]		0.00	1.05	1.60
	Max Shear	[kN]		105.04	59.27	72.96
	x	[m]		0.00	0.59	1.60
	Min Torsion	[kN]		-2.56	--	-1.83
	x	[m]		0.00	--	1.52
Top Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	4.57	4.56	6.84
Bot. Reinf. Area		[cm²]	Real	6.03	6.99	10.06
			Req.	5.03	5.03	6.08
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.01 mm, L/126623 (L: 1.60 m)		



2.30.- Frame 30



Frame 30			Span: V-261		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-5.83	-2.67	-10.67
	x	[m]	0.00	0.68	1.05
	Max Moment	[kN·m]	2.96	--	1.58
	x	[m]	0.00	--	0.91
	Min Shear	[kN]	-6.94	-14.25	-28.12
	x	[m]	0.33	0.68	1.05
	Max Shear	[kN]	21.01	6.99	1.99
	x	[m]	0.00	0.44	0.79
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	2.52
	x	[m]	--	--	1.03

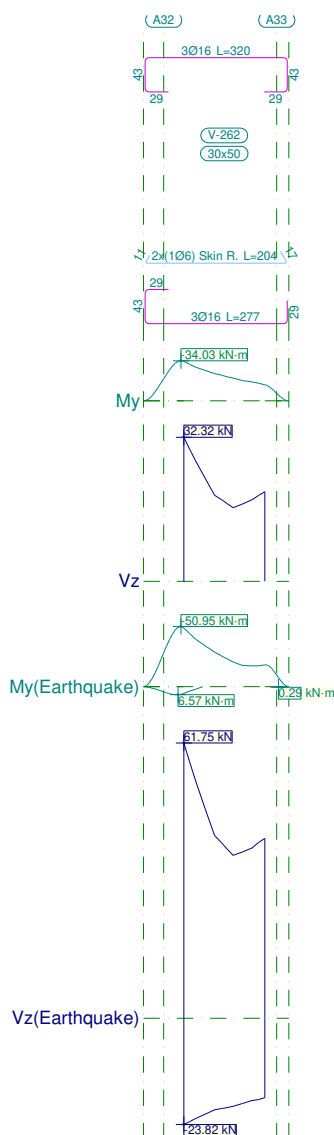


Beam reinforcement report

Frame 30				Span: V-261		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-28.55	-10.83	-36.77
		[m]		0.00	0.68	1.05
	Max Moment x	[kN·m]		25.69	9.36	27.60
		[m]		0.00	0.68	1.05
	Min Shear x	[kN]		-61.88	-55.83	-86.66
		[m]		0.00	0.68	1.05
	Max Shear x	[kN]		79.33	50.77	58.27
		[m]		0.00	0.44	1.05
	Min Torsion x	[kN]		-2.40	--	-2.36
		[m]		0.00	--	1.03
Max Torsion x	[kN]		--	--	5.75	
	[m]		--	--	1.03	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	5.46
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.78
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.05 m)		



2.31.- Frame 31



Frame 31			Span: V-262		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-33.52	-23.19	-17.25
	x	[m]	0.00	0.38	0.73
	Max Moment	[kN·m]	--	--	--
	x	[m]	--	--	--
	Min Shear	[kN]	--	--	--
	x	[m]	--	--	--
	Max Shear	[kN]	32.32	19.33	20.10
	x	[m]	0.00	0.38	1.01
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

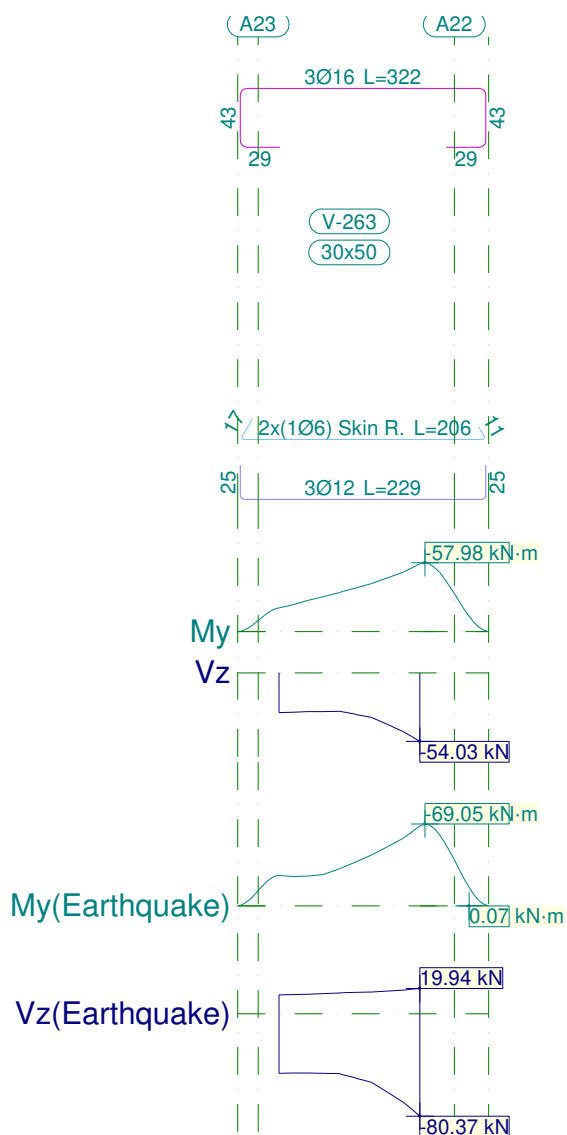


Beam reinforcement report

Frame 31				Span: V-262		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-49.77	-29.32	-18.58
		[m]		0.00	0.38	1.01
	Max Moment x	[kN·m]		5.63	--	--
		[m]		0.00	--	--
	Min Shear x	[kN]		-23.82	-20.52	-19.07
		[m]		0.00	0.38	0.73
	Max Shear x	[kN]		61.75	41.00	40.35
		[m]		0.00	0.38	1.01
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	3.02
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.18 mm, L/11419 (L: 2.01 m)		



2.32.- Frame 32



Frame 32			Span: V-263		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-29.45	-40.41	-57.15
	x	[m]	0.32	0.67	1.03
	Max Moment	[kN·m]	--	--	--
	x	[m]	--	--	--
	Min Shear	[kN]	-31.27	-35.00	-54.03
	x	[m]	0.00	0.67	1.03
	Max Shear	[kN]	--	--	--
	x	[m]	--	--	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

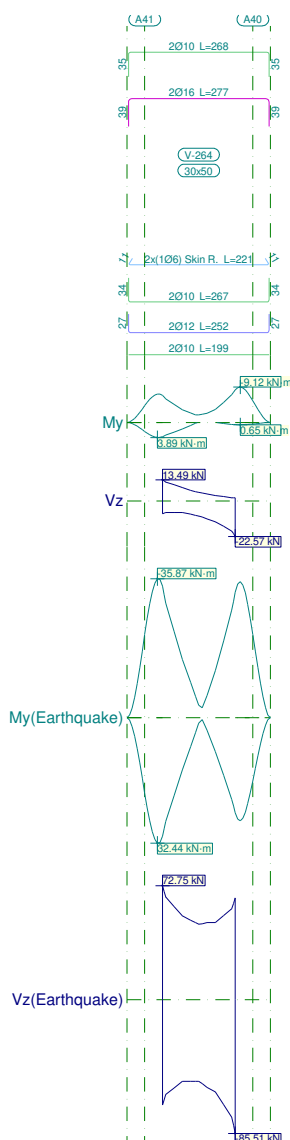


Beam reinforcement report

Frame 32				Span: V-263		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-26.46	-42.78	-67.56
		[m]		0.32	0.67	1.03
	Max Moment x	[kN·m]		--	--	--
		[m]		--	--	--
	Min Shear x	[kN]		-46.76	-53.70	-80.37
		[m]		0.32	0.67	1.03
	Max Shear x	[kN]		15.90	17.07	19.94
		[m]		0.32	0.67	1.03
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
	Max Torsion x	[kN]		--	--	--
		[m]		--	--	--
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.66	4.66
Bot. Reinf. Area		[cm²]	Real	3.39	3.39	3.39
			Req.	3.02	3.02	3.02
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.26 mm, L/8037 (L: 2.05 m)		



2.33.- Frame 33



Frame 33			Span: V-264		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-7.01	-2.43	-8.40
	x	[m]	0.00	0.40	1.03
	Max Moment	[kN·m]	3.67	--	--
	x	[m]	0.00	--	--
	Min Shear	[kN]	-8.20	-11.39	-22.57
	x	[m]	0.00	0.63	1.03
	Max Shear	[kN]	13.49	6.83	3.49
	x	[m]	0.00	0.40	0.75
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

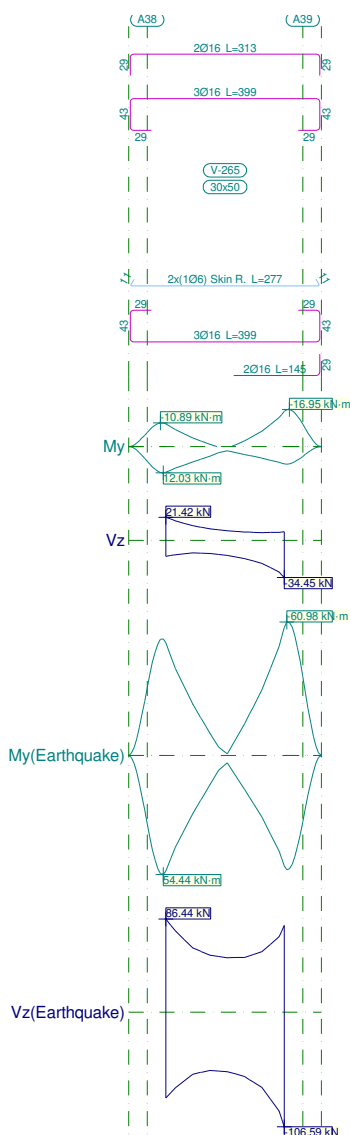


Beam reinforcement report

Frame 33				Span: V-264		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-33.93	-9.10	-32.41
		[m]		0.00	0.40	1.03
	Max Moment x	[kN·m]		30.59	7.48	24.58
		[m]		0.00	0.40	1.03
	Min Shear x	[kN]		-67.46	-56.17	-85.51
		[m]		0.00	0.63	1.03
	Max Shear x	[kN]		72.75	50.68	64.96
		[m]		0.00	0.40	1.03
	Min Torsion x	[kN]		-2.47	--	-2.54
		[m]		0.00	--	0.98
	Max Torsion x	[kN]		3.81	--	--
		[m]		0.00	--	--
Top Reinf. Area		[cm²]	Real	5.59	5.59	5.59
			Req.	5.25	4.57	4.57
Bot. Reinf. Area		[cm²]	Real	5.40	5.40	5.40
			Req.	4.94	4.58	4.58
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.02 mm, L/112724 (L: 2.06 m)		



2.34.- Frame 34



Frame 34			Span: V-265		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-10.42	-2.69	-16.03
	x	[m]	0.00	1.06	1.60
	Max Moment	[kN·m]	11.78	4.32	7.92
	x	[m]	0.00	0.60	1.60
	Min Shear	[kN]	-14.65	-16.74	-34.45
	x	[m]	0.00	1.06	1.60
	Max Shear	[kN]	21.42	10.78	8.25
	x	[m]	0.00	0.60	1.60
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

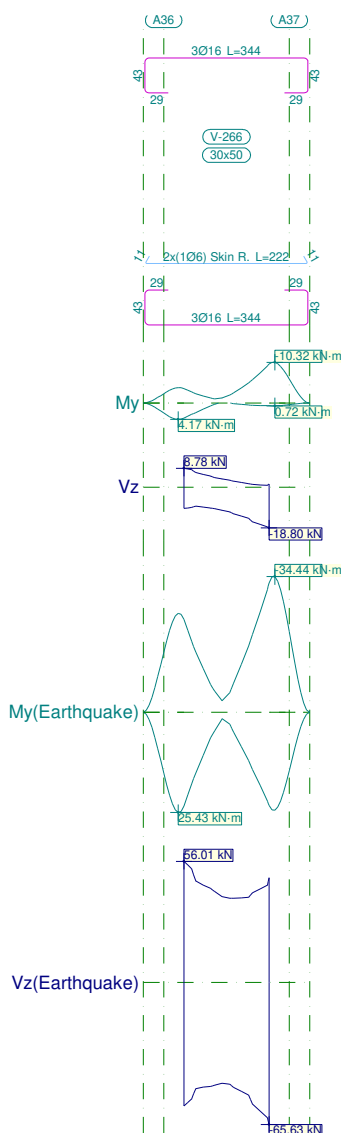


Beam reinforcement report

Frame 34				Span: V-265		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-51.42	-14.47	-58.55
		[m]		0.00	1.06	1.60
	Max Moment x	[kN·m]		52.78	15.45	50.44
		[m]		0.00	1.06	1.60
	Min Shear x	[kN]		-79.67	-59.73	-106.59
		[m]		0.00	1.06	1.60
	Max Shear x	[kN]		86.44	52.89	80.39
		[m]		0.00	0.60	1.60
	Min Torsion x	[kN]		-1.68	--	-3.31
		[m]		0.00	--	1.53
Max Torsion x	[kN]		1.72	--	2.67	
	[m]		0.00	--	1.53	
Top Reinf. Area		[cm²]	Real	10.06	10.06	10.06
			Req.	4.56	4.56	6.73
Bot. Reinf. Area		[cm²]	Real	6.03	7.05	10.06
			Req.	5.03	5.03	6.11
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.60 m)		



2.35.- Frame 35



Frame 35			Span: V-266		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-3.64	-2.55	-9.88
	x	[m]	0.00	0.61	1.05
	Max Moment	[kN·m]	3.87	--	--
	x	[m]	0.00	--	--
	Min Shear	[kN]	-9.83	-12.26	-18.80
	x	[m]	0.00	0.61	1.05
	Max Shear	[kN]	8.78	4.80	2.21
	x	[m]	0.00	0.35	0.70
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

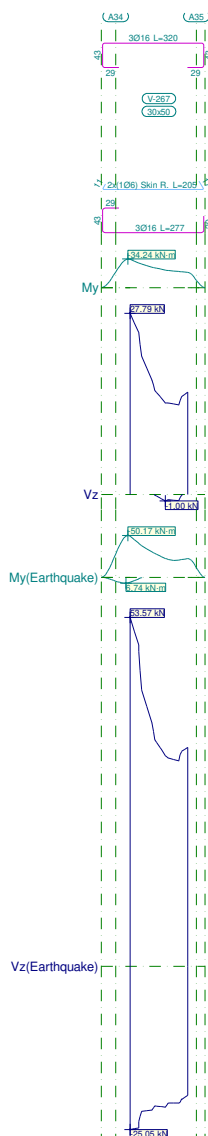


Beam reinforcement report

Frame 35				Span: V-266		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-23.54	-7.44	-32.81
		[m]		0.00	0.61	1.05
	Max Moment x	[kN·m]		23.77	5.49	23.61
		[m]		0.00	0.35	1.05
	Min Shear x	[kN]		-57.06	-48.45	-65.63
		[m]		0.00	0.61	1.05
	Max Shear x	[kN]		56.01	42.70	48.37
		[m]		0.00	0.35	1.05
	Min Torsion x	[kN]		--	--	-2.59
		[m]		--	--	1.03
Max Torsion x	[kN]		--	--	2.89	
	[m]		--	--	1.03	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	5.17
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.02 mm, L/95543 (L: 2.09 m)		



2.36.- Frame 36



Frame 36			Span: V-267		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-33.88	-24.54	-19.74
		[m]	0.00	0.39	0.76
	Max Moment	[kN·m]	--	--	--
		[m]	--	--	--
	Min Shear	[kN]	--	-1.00	-0.93
		[m]	--	0.62	0.85
	Max Shear	[kN]	27.79	17.61	15.74
		[m]	0.00	0.39	1.01
	Min Torsion	[kN]	--	--	--
		[m]	--	--	--
	Max Torsion	[kN]	1.40	--	--
		[m]	0.15	--	--

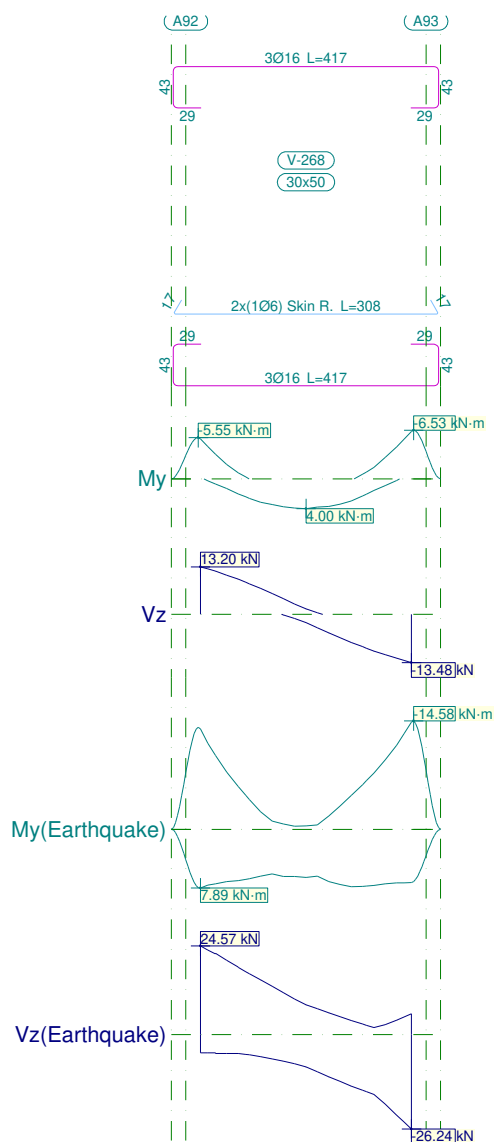


Beam reinforcement report

Frame 36				Span: V-267		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-49.24	-30.45	-22.40
		[m]		0.00	0.39	1.01
	Max Moment x	[kN·m]		5.74	--	--
		[m]		0.00	--	--
	Min Shear x	[kN]		-25.05	-22.03	-20.96
		[m]		0.00	0.39	0.76
	Max Shear x	[kN]		53.57	37.39	33.63
		[m]		0.00	0.39	1.01
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		1.98	--	--	
	[m]		0.20	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	3.02
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.18 mm, L/11269 (L: 2.02 m)		



2.37.- Frame 37



Frame 37			Span: V-268		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-5.38	--	-6.38
	x	[m]	0.00	--	2.18
	Max Moment	[kN·m]	3.16	4.00	2.98
	x	[m]	0.62	1.09	1.56
	Min Shear	[kN]	--	-6.47	-13.48
	x	[m]	--	1.44	2.18
	Max Shear	[kN]	13.20	5.77	--
	x	[m]	0.00	0.74	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

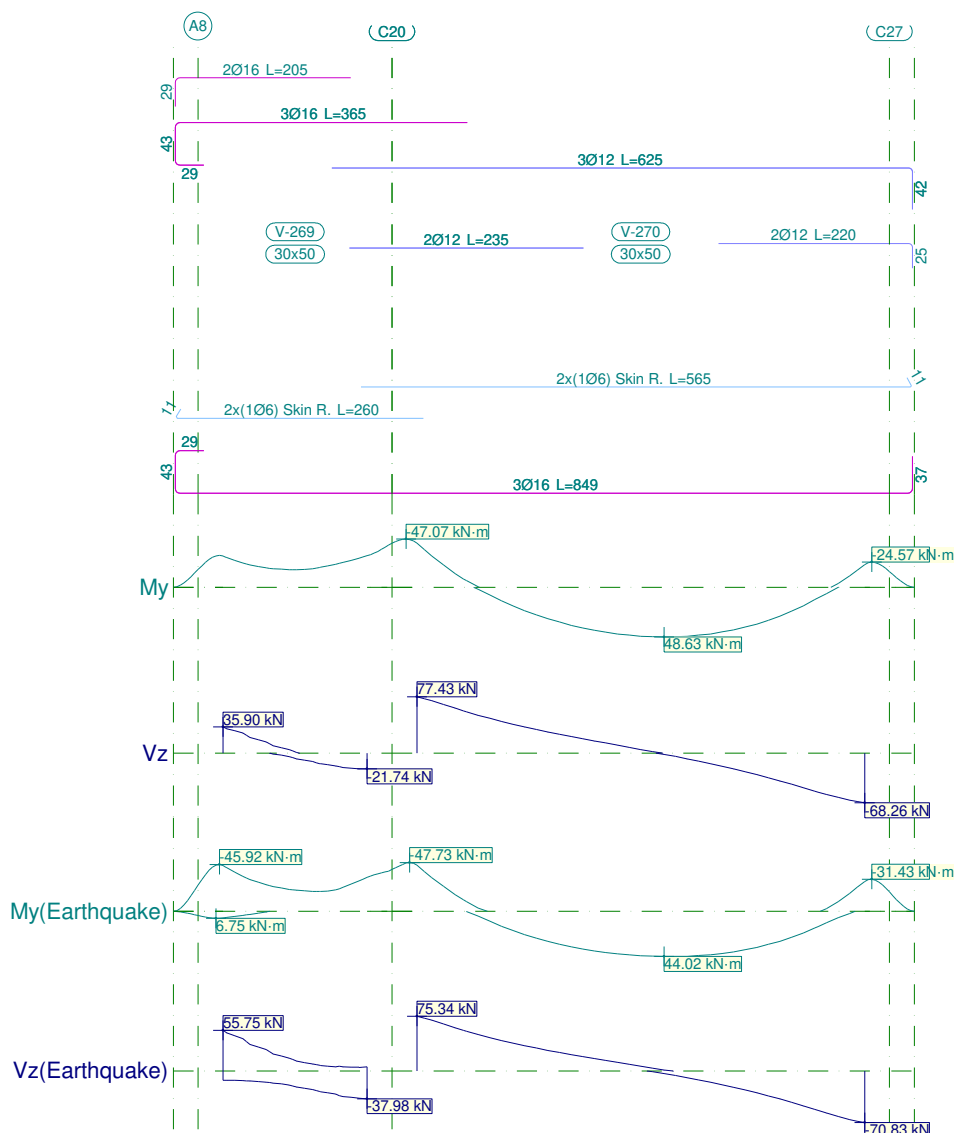


Beam reinforcement report

Frame 37				Span: V-268		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-13.50	-3.13	-14.43
		[m]		0.00	1.44	2.18
	Max Moment x	[kN·m]		7.89	7.42	7.75
		[m]		0.00	1.44	1.56
	Min Shear x	[kN]		-6.13	-13.03	-26.24
		[m]		0.62	1.44	2.18
	Max Shear x	[kN]		24.57	13.37	5.72
		[m]		0.00	0.74	2.18
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.02 mm, L/136954 (L: 2.18 m)		



2.38.- Frame 38



Frame 38			Span: V-269			Span: V-270		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-30.44	-18.68	-30.79	-43.00	--	-22.22
	x	[m]	0.00	0.94	1.45	0.00	--	4.50
	Max Moment	[kN·m]	--	--	--	34.06	48.63	43.73
	x	[m]	--	--	--	1.43	2.48	3.07
	Min Shear	[kN]	-0.03	-13.05	-21.74	--	-14.51	-68.26
	x	[m]	0.47	0.94	1.45	--	2.95	4.50
	Max Shear	[kN]	35.90	10.20	--	77.43	22.81	--
	x	[m]	0.00	0.50	--	0.00	1.55	--
	Min Torsion	[kN]	-3.24	-3.24	-2.91	--	--	--
	x	[m]	0.43	0.50	0.97	--	--	--
	Max Torsion	[kN]	2.65	1.52	--	--	--	--
	x	[m]	0.04	0.50	--	--	--	--

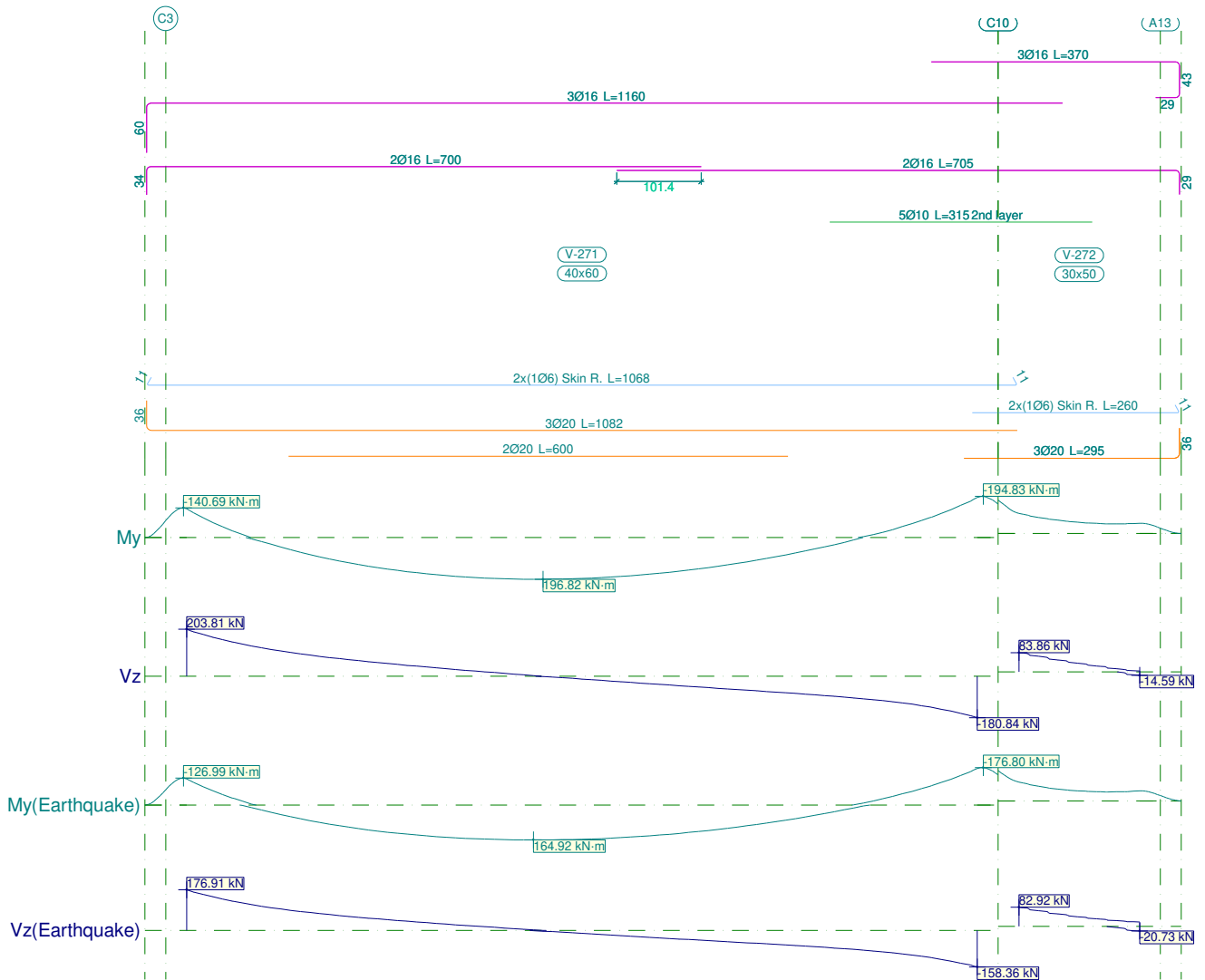


Beam reinforcement report

Frame 38				Span: V-269			Span: V-270		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-44.86	-24.33	-33.28	-45.11	--	-29.34
		[m]		0.00	0.50	1.45	0.00	--	4.50
	Max Moment x	[kN·m]		6.43	--	--	32.03	44.02	41.08
		[m]		0.00	--	--	1.43	2.48	3.07
	Min Shear x	[kN]		-15.98	-26.73	-37.98	--	-15.47	-70.83
		[m]		0.47	0.94	1.45	--	2.95	4.50
	Max Shear x	[kN]		55.75	23.53	7.76	75.34	22.54	--
		[m]		0.00	0.50	0.97	0.00	1.55	--
	Min Torsion x	[kN]		-3.32	-3.29	-2.86	--	--	--
		[m]		0.20	0.50	0.97	--	--	--
Max Torsion x	[kN]		3.09	1.59	--	--	--	--	
	[m]		0.04	0.50	--	--	--	--	
Top Reinf. Area		[cm²]	Real	10.06	10.06	8.85	9.67	3.88	5.66
			Req.	5.85	5.65	5.00	4.58	3.02	4.58
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	5.03	5.03	4.42	4.84	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	2.46	2.46	2.46
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.06 mm, L/24853 (L: 1.45 m)			1.10 mm, L/4084 (L: 4.50 m)		



2.39.- Frame 39

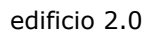


Frame 39			Span: V-271			Span: V-272		
Section			40x60			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-136.40	--	-189.91	-94.97	-57.95	-48.70
	x	[m]	0.00	--	9.50	0.00	0.57	1.45
	Max Moment	[kN·m]	179.33	196.82	135.26	--	--	--
	x	[m]	3.12	4.28	6.38	--	--	--
	Min Shear	[kN]	--	-50.17	-180.84	--	--	-14.59
	x	[m]	--	6.27	9.50	--	--	1.45
	Max Shear	[kN]	203.81	28.66	--	83.86	48.17	24.19
	x	[m]	0.00	3.23	--	0.00	0.57	0.98
	Min Torsion	[kN]	--	--	--	--	--	-1.85
	x	[m]	--	--	--	--	--	1.30
	Max Torsion	[kN]	--	--	--	4.67	4.77	4.73
	x	[m]	--	--	--	0.34	0.80	1.04



Beam reinforcement report

Frame 39				Span: V-271			Span: V-272		
Section				40x60			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-123.34	--	-172.73	-89.02	-51.64	-47.18
		[m]		0.00	--	9.50	0.00	0.57	1.45
	Max Moment x	[kN·m]		152.47	164.92	115.29	--	--	--
		[m]		3.12	4.17	6.38	--	--	--
	Min Shear x	[kN]		--	-43.87	-158.36	--	--	-20.73
		[m]		--	6.27	9.50	--	--	1.45
	Max Shear x	[kN]		176.91	25.07	--	82.92	50.20	31.52
		[m]		0.00	3.23	--	0.00	0.57	0.98
	Min Torsion x	[kN]		--	--	-1.76	--	--	-2.64
		[m]		--	--	9.42	--	--	1.30
Max Torsion x	[kN]		--	--	--	4.43	4.49	4.54	
	[m]		--	--	--	0.34	0.80	1.04	
Top Reinf. Area		[cm²]	Real	10.06	10.06	18.38	18.15	12.62	10.06
			Req.	7.86	7.86	9.67	13.03	8.39	6.55
Bot. Reinf. Area		[cm²]	Real	15.71	15.71	15.71	9.43	9.43	9.43
			Req.	9.29	9.58	9.19	9.07	6.31	5.03
Transv. Reinf. Area		[cm²/m]	Real	3.77	3.33	3.33	3.33	3.33	3.33
			Req.	3.37	3.26	3.26	2.45	2.45	2.45
Active Defl.				10.89 mm, L/872 (L: 9.50 m)			0.80 mm, L/3613 (L: 2.90 m)		



Date: 11/20/20

Structural analysis diagrams for a 30x50 slab. The top diagram shows the slab layout with dimensions (30x50), reinforcement (3Ø16 L=698, 2x(106) Skin R. L=310, 2x(106) Skin R. L=170), and column locations (A12, A11, A10, A9). Below are three diagrams: My (green), Vz (purple), and Vz(Earthquake) (purple). Each diagram shows the distribution of moments and reactions along the slab length, with values labeled at various points.

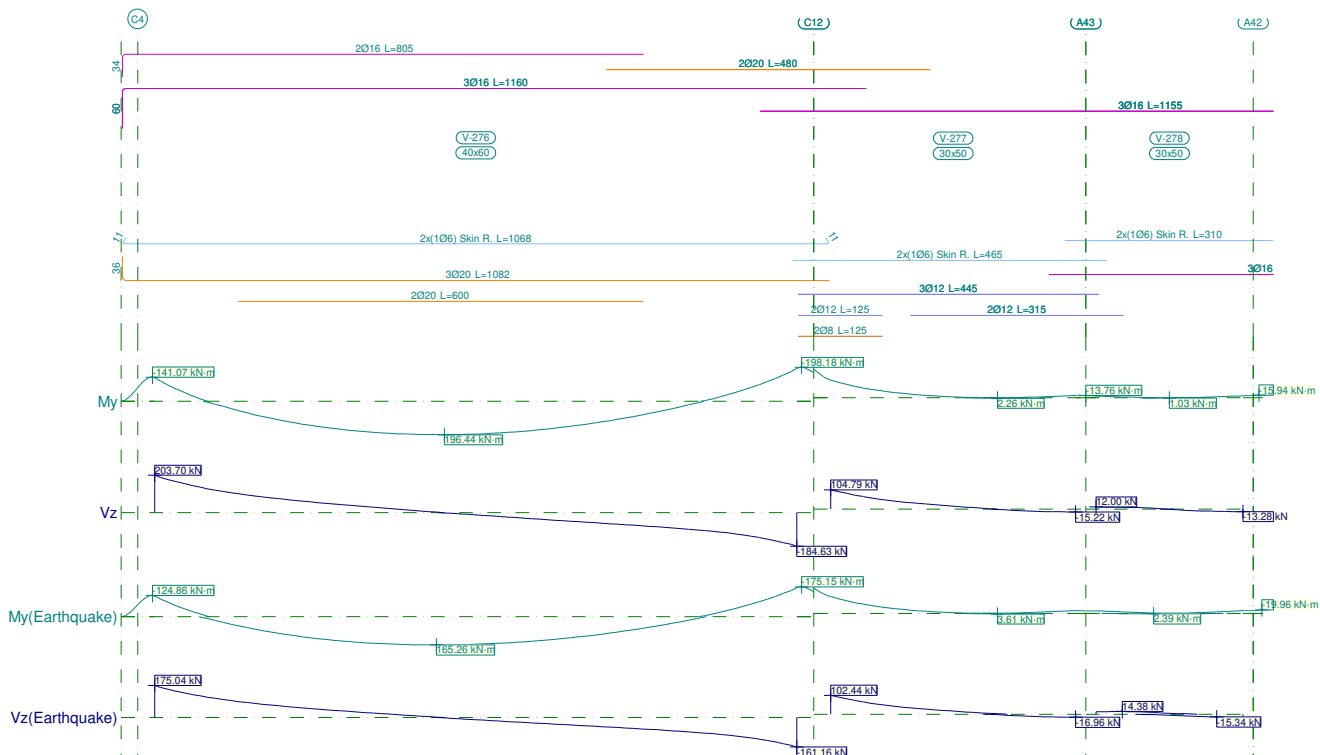


Beam reinforcement report

Frame 40				Span: V-273			Span: V-274			Span: V-275		
Section				30x50			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-8.29	-3.13	-5.99	-7.39	--	-8.53	-7.95	-8.70	-11.82
		[m]		0.00	0.48	1.17	0.00	--	2.18	0.18	0.37	0.65
	Max Moment	[kN·m]		4.39	3.10	--	5.87	8.51	6.81	--	--	--
		[m]		0.00	0.45	--	0.62	1.09	1.56	--	--	--
	Min Shear	[kN]		-4.79	-10.14	-15.52	--	-9.89	-18.37	-6.63	-8.18	-14.41
		[m]		0.34	0.71	1.17	--	1.44	2.18	0.18	0.37	0.65
	Max Shear	[kN]		15.17	5.15	--	18.46	9.75	--	1.33	--	--
		[m]		0.00	0.45	--	0.00	0.74	--	0.00	--	--
	Min Torsion	[kN]		--	--	--	--	--	--	--	-1.46	-2.36
		[m]		--	--	--	--	--	--	--	0.22	0.45
	Max Torsion	[kN]		3.75	3.02	1.80	--	--	--	1.43	1.52	1.52
		[m]		0.21	0.45	0.91	--	--	--	0.06	0.29	0.45
Seismic situations	Min Moment.	[kN·m]		-32.34	-14.41	-13.98	-16.66	-2.13	-20.41	-16.15	-20.63	-31.70
		[m]		0.00	0.45	1.17	0.00	1.44	2.18	0.18	0.37	0.65
	Max Moment	[kN·m]		28.44	14.43	5.27	9.61	12.41	12.83	6.68	10.38	17.36
		[m]		0.00	0.45	1.17	0.62	1.44	1.56	0.18	0.37	0.65
	Min Shear	[kN]		-32.70	-29.97	-37.49	-4.44	-18.71	-26.83	-28.67	-33.58	-44.84
		[m]		0.21	0.68	1.17	0.62	1.44	2.18	0.18	0.37	0.65
	Max Shear	[kN]		46.14	29.09	18.16	26.67	18.25	5.10	22.57	23.05	25.89
		[m]		0.00	0.45	0.81	0.00	0.74	1.56	0.00	0.37	0.52
	Min Torsion	[kN]		--	--	--	--	--	--	--	-1.87	-2.93
		[m]		--	--	--	--	--	--	--	0.22	0.45
	Max Torsion	[kN]		4.70	3.75	2.19	--	--	--	1.41	1.59	1.59
		[m]		0.24	0.48	0.93	--	--	--	0.06	0.29	0.45
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	5.11	5.05	4.56	4.56	4.56	4.56	4.56	4.56	5.07
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.82	4.82	4.56	4.56	4.56	4.56	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	2.46	2.46	2.46	3.33	3.33	3.33
			Req.	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.17 m)			0.05 mm, L/47428 (L: 2.18 m)			0.02 mm, L/58015 (L: 1.30 m)		



2.41.- Frame 41



Frame 41			Span: V-276			Span: V-277			Span: V-278		
Section			40x60			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-136.80	--	-192.44	-103.71	-17.86	-14.57	-10.96	-1.71	-12.18
		[m]	0.00	--	9.50	0.00	1.30	3.63	0.00	1.44	2.18
	Max Moment	[kN·m]	178.98	196.44	134.90	--	2.07	2.26	--	--	--
		[m]	3.12	4.28	6.38	--	2.35	2.47	--	--	--
	Min Shear	[kN]	--	-49.99	-184.63	--	--	-15.22	--	-7.67	-13.28
		[m]	--	6.27	9.50	--	--	3.63	--	1.44	2.18
	Max Shear	[kN]	203.70	28.51	--	104.79	31.11	0.11	12.00	6.60	--
		[m]	0.00	3.23	--	0.00	1.30	2.47	0.00	0.74	--
	Min Torsion	[kN]	--	--	--	--	--	--	--	--	--
		[m]	--	--	--	--	--	--	--	--	--
	Max Torsion	[kN]	--	--	--	--	--	--	--	--	--
		[m]	--	--	--	--	--	--	--	--	--



Beam reinforcement report

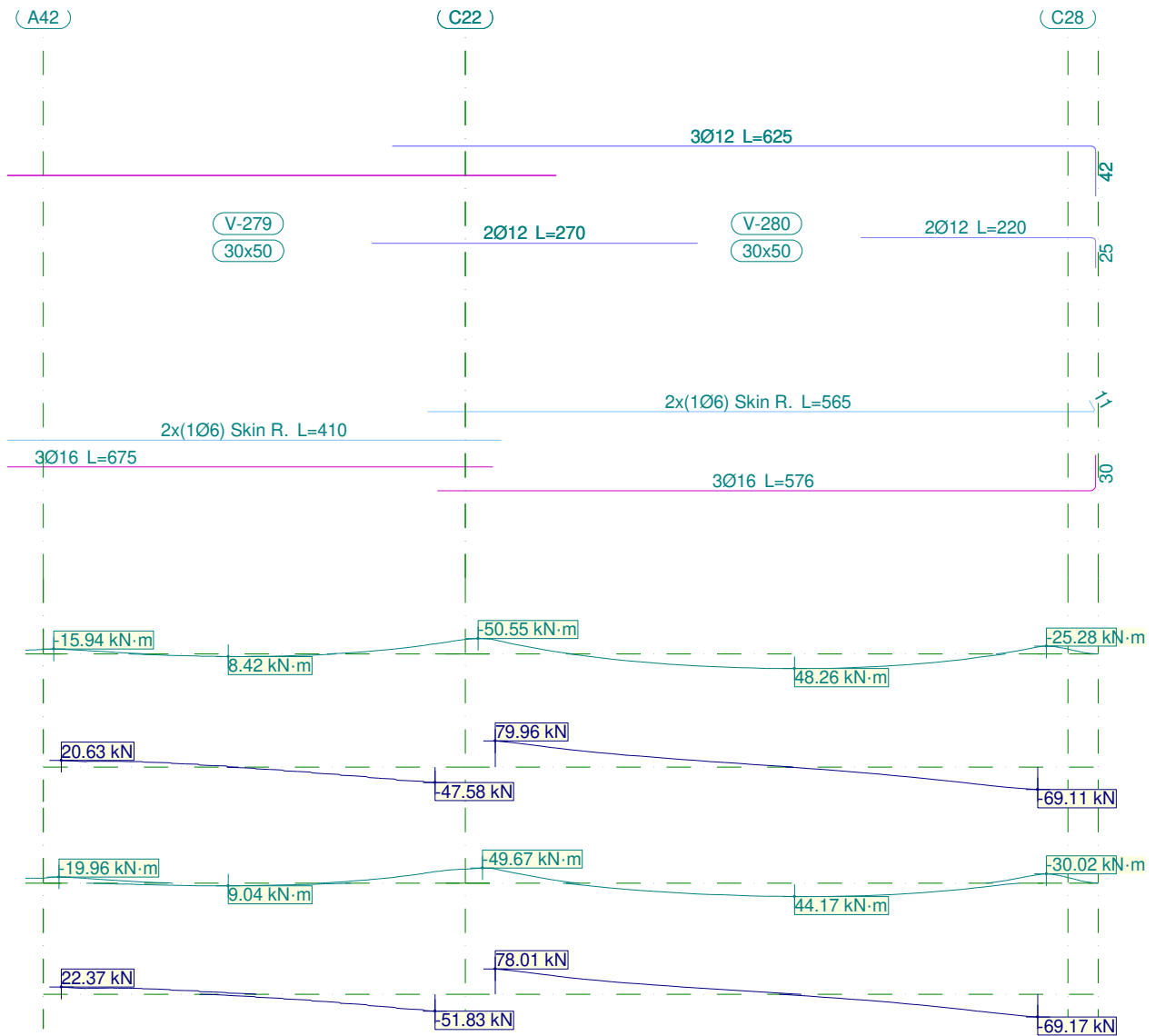
Frame 41				Span: V-276			Span: V-277			Span: V-278		
Section				40x60			30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-121.24	--	-170.62	-99.09	-15.15	-17.15	-14.96	-3.19	-16.03
		x		[m]	0.00	--	9.50	0.00	1.30	3.63	0.00	1.44
	Max Moment	[kN·m]		152.40	165.26	113.05	--	3.22	3.61	2.04	2.39	1.48
		x		[m]	3.12	4.17	6.38	--	2.35	2.47	0.62	0.85
	Min Shear	[kN]		--	-43.06	-161.16	--	-1.15	-16.96	-0.30	-11.75	-15.34
		x		[m]	--	6.27	9.50	--	2.35	3.63	0.62	1.44
	Max Shear	[kN]		175.04	24.44	--	102.44	30.64	1.96	14.38	10.74	--
		x		[m]	0.00	3.23	--	0.00	1.30	2.47	0.39	0.74
	Min Torsion	[kN]		--	--	--	--	--	--	--	--	--
		x		[m]	--	--	--	--	--	--	--	--
	Max Torsion	[kN]		--	--	--	--	--	--	--	--	--
		x		[m]	--	--	--	--	--	--	--	--
Top Reinf. Area		[cm²]	Real	10.06	10.06	16.63	16.48	7.19	6.03	6.03	6.03	6.03
			Req.	7.86	7.86	9.72	10.20	4.59	4.59	4.59	4.59	4.59
Bot. Reinf. Area		[cm²]	Real	15.71	15.71	15.71	6.66	5.66	9.03	8.45	6.03	6.03
			Req.	9.27	9.56	8.31	8.24	4.58	4.58	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.77	3.33	3.33	2.46	2.46	2.46	2.46	2.46	2.46
			Req.	3.36	3.26	3.26	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				10.76 mm, L/883 (L: 9.50 m)			0.37 mm, L/16505 (L: 6.10 m)			0.35 mm, L/17594 (L: 6.10 m)		



Beam reinforcement report

edificio 2.0

Date: 11/20/20



Frame 41			Span: V-279			Span: V-280		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-15.35	--	-33.36	-45.80	--	-22.92
	x	[m]	0.00	--	3.10	0.00	--	4.50
	Max Moment	[kN·m]	5.99	8.42	3.90	33.27	48.26	43.40
	x	[m]	1.03	1.38	2.07	1.43	2.48	3.07
	Min Shear	[kN]	--	-13.71	-47.58	--	-14.45	-69.11
	x	[m]	--	1.96	3.10	--	2.95	4.50
	Max Shear	[kN]	20.63	8.33	--	79.96	23.31	--
	x	[m]	0.00	1.13	--	0.00	1.55	--
	Min Torsion	[kN]	-3.51	-3.48	-3.25	--	--	--
	x	[m]	0.90	1.13	2.07	--	--	--
	Max Torsion	[kN]	--	--	--	--	--	--
	x	[m]	--	--	--	--	--	--

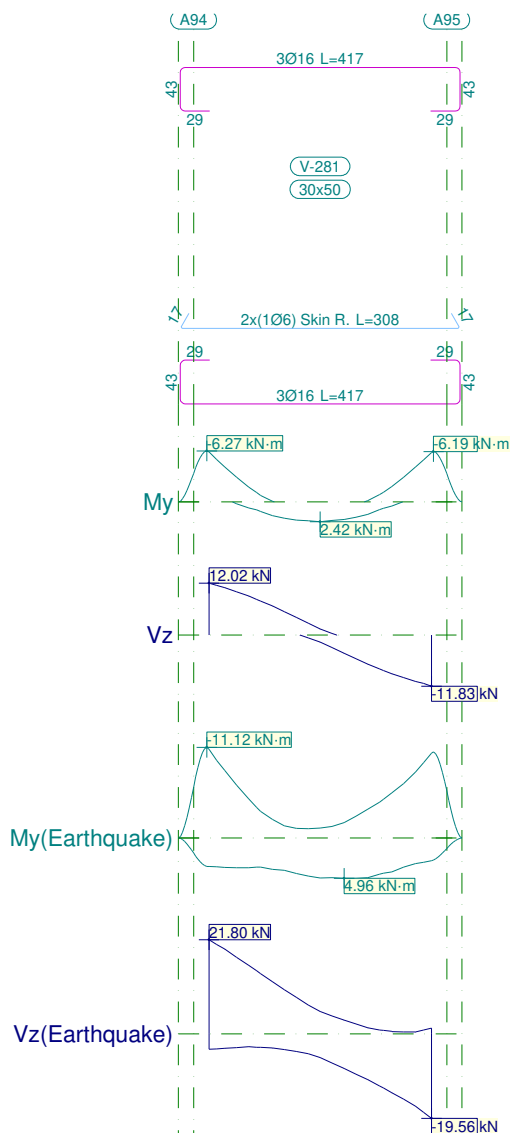


Beam reinforcement report

Frame 41				Span: V-279			Span: V-280		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-19.68	--	-37.77	-46.54	--	-27.94
		[m]		0.00	--	3.10	0.00	--	4.50
	Max Moment x	[kN·m]		7.96	9.04	4.30	30.31	44.17	40.93
		[m]		1.03	1.38	2.07	1.43	2.48	3.07
	Min Shear x	[kN]		--	-16.12	-51.83	--	-14.66	-69.17
		[m]		--	1.96	3.10	--	2.95	4.50
	Max Shear x	[kN]		22.37	10.43	--	78.01	22.63	--
		[m]		0.00	1.13	--	0.00	1.55	--
	Min Torsion x	[kN]		-3.59	-3.45	-3.19	--	--	--
		[m]		0.67	1.13	2.53	--	--	--
Max Torsion x	[kN]		--	--	--	--	--	--	
	[m]		--	--	--	--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	10.22	9.68	3.90	5.66
			Req.	4.56	4.56	5.73	4.58	3.02	4.58
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.56	4.56	5.11	4.84	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	2.46	2.46	2.46
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.03 mm, L/43139 (L: 1.34 m)			1.07 mm, L/4191 (L: 4.50 m)		



2.42.- Frame 42



Frame 42			Span: V-281		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-6.14	--	-6.06
	x	[m]	0.00	--	2.18
	Max Moment	[kN·m]	1.66	2.42	1.51
	x	[m]	0.62	1.09	1.56
	Min Shear	[kN]	--	-5.51	-11.83
	x	[m]	--	1.44	2.18
	Max Shear	[kN]	12.02	5.40	--
	x	[m]	0.00	0.74	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

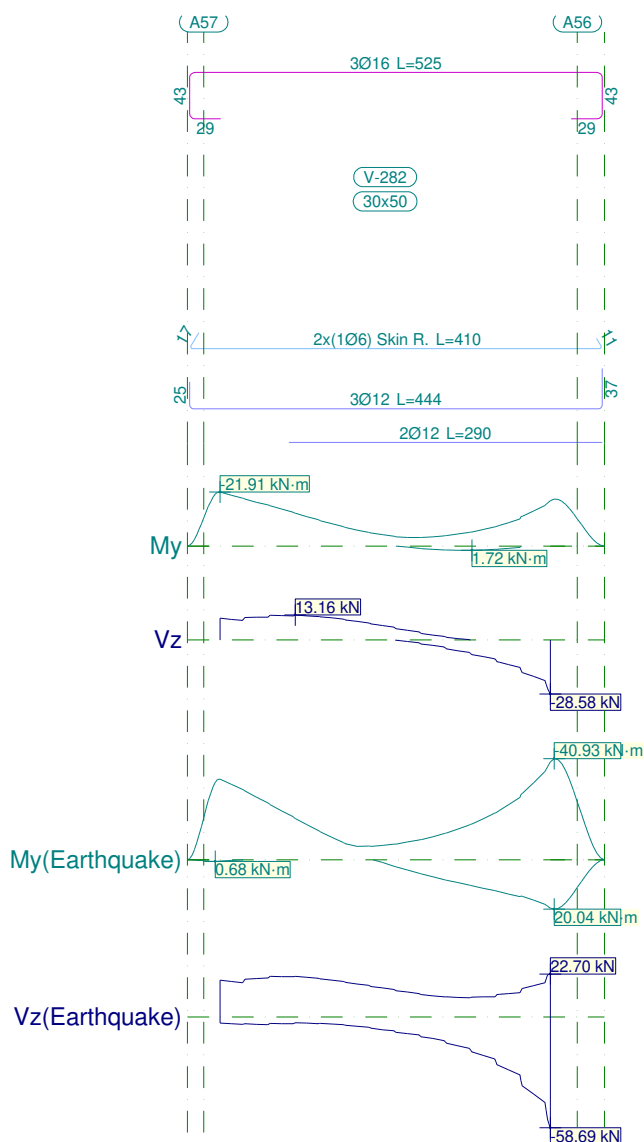


Beam reinforcement report

Frame 42				Span: V-281		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-10.89	-2.67	-10.43
		[m]		0.00	1.44	2.18
	Max Moment x	[kN·m]		3.87	4.96	4.86
		[m]		0.62	1.32	1.56
	Min Shear x	[kN]		-3.60	-9.31	-19.56
		[m]		0.00	1.44	2.18
	Max Shear x	[kN]		21.80	10.26	1.41
		[m]		0.00	0.74	1.56
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 2.18 m)		



2.43.- Frame 43



Frame 43			Span: V-282		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-21.91	-9.01	-18.38
	x	[m]	0.00	1.04	3.06
	Max Moment	[kN·m]	--	--	1.72
	x	[m]	--	--	2.33
	Min Shear	[kN]	--	-2.87	-28.58
	x	[m]	--	1.97	3.06
	Max Shear	[kN]	13.16	11.65	1.90
	x	[m]	0.70	1.04	2.08
	Min Torsion	[kN]	--	-1.64	-2.31
	x	[m]	--	1.84	3.01
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

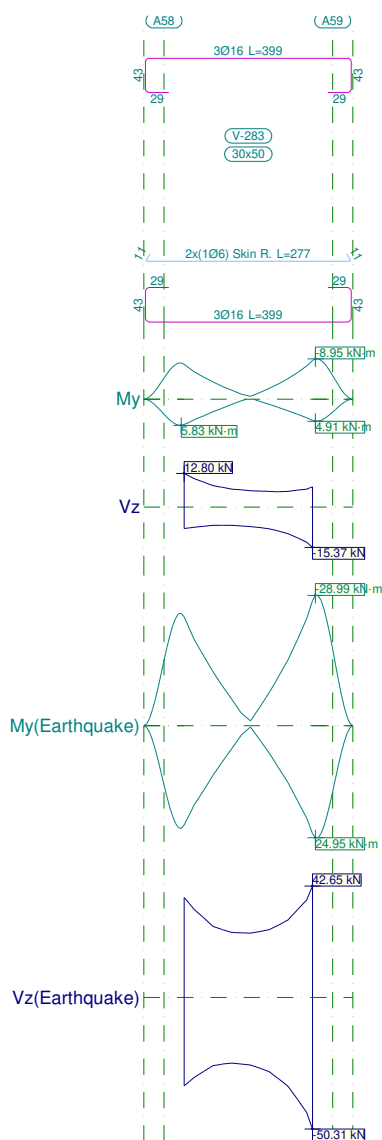


Beam reinforcement report

Frame 43				Span: V-282		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-32.62	-9.37	-39.71
		[m]		0.00	1.97	3.06
	Max Moment x	[kN·m]		--	6.94	19.64
		[m]		--	1.97	3.06
	Min Shear x	[kN]		-4.17	-11.41	-58.69
		[m]		0.44	1.97	3.06
	Max Shear x	[kN]		21.48	19.48	22.70
		[m]		0.47	1.04	3.06
	Min Torsion x	[kN]		-1.56	-1.92	-4.44
		[m]		0.91	1.84	3.01
Max Torsion x	[kN]		--	--	2.63	
	[m]		--	--	3.03	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	5.55
Bot. Reinf. Area		[cm²]	Real	4.90	5.66	5.66
			Req.	3.02	4.58	4.58
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.42 mm, L/14597 (L: 6.12 m)		



2.44.- Frame 44



Frame 44			Span: V-283		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-7.77	-2.41	-8.60
	x	[m]	0.00	1.06	1.60
	Max Moment	[kN·m]	5.66	--	4.74
	x	[m]	0.00	--	1.60
	Min Shear	[kN]	-8.25	-8.31	-15.37
	x	[m]	0.00	1.06	1.60
	Max Shear	[kN]	12.80	6.90	7.71
	x	[m]	0.00	0.59	1.60
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

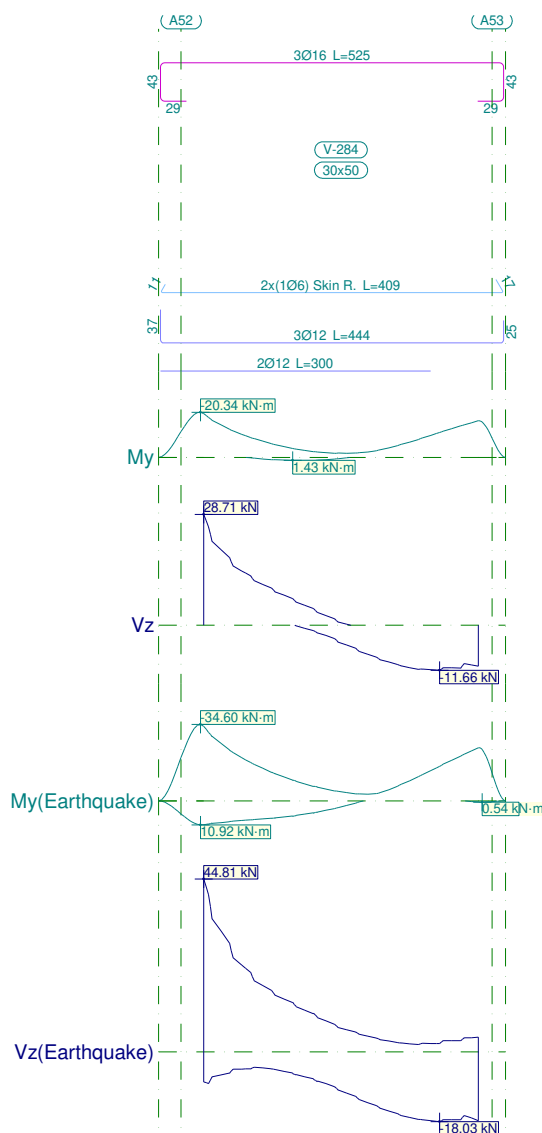


Beam reinforcement report

Frame 44				Span: V-283		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-24.22	-7.39	-27.86
		[m]		0.00	1.06	1.60
	Max Moment x	[kN·m]		22.11	6.14	24.00
		[m]		0.00	1.06	1.60
	Min Shear x	[kN]		-33.73	-28.37	-50.31
		[m]		0.00	1.06	1.60
	Max Shear x	[kN]		38.29	26.00	42.65
		[m]		0.00	1.06	1.60
	Min Torsion x	[kN]		-1.63	--	-3.43
		[m]		0.00	--	1.53
Max Torsion x	[kN]		2.55	--	2.72	
	[m]		0.00	--	1.53	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.86
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.57
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.60 m)		



2.45.- Frame 45



Frame 45			Span: V-284		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-19.75	-3.75	-16.51
	x	[m]	0.00	1.03	3.05
	Max Moment	[kN·m]	1.43	1.41	--
	x	[m]	0.99	1.03	--
	Min Shear	[kN]	--	-8.91	-11.66
	x	[m]	--	1.96	2.62
	Max Shear	[kN]	28.71	6.02	--
	x	[m]	0.00	1.03	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	2.34	1.74	--
	x	[m]	0.06	1.03	--

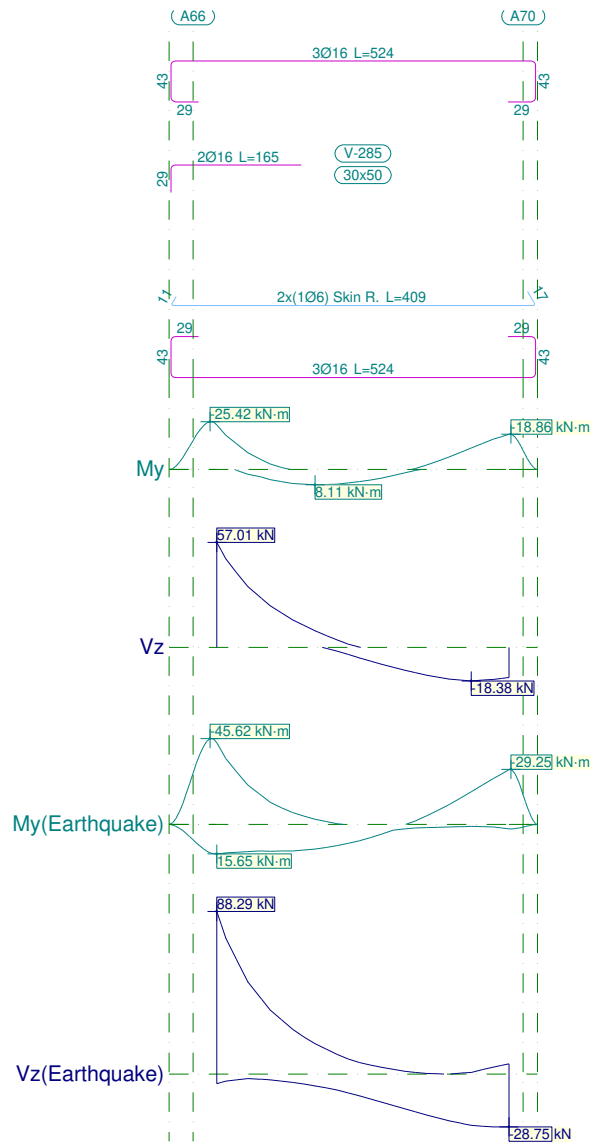


Beam reinforcement report

Frame 45				Span: V-284		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-33.74	-8.97	-24.00
		[m]		0.00	1.03	3.05
	Max Moment x	[kN·m]		10.86	6.63	--
		[m]		0.00	1.03	--
	Min Shear x	[kN]		-8.14	-14.59	-18.03
		[m]		0.06	1.96	2.62
	Max Shear x	[kN]		44.81	11.81	3.83
		[m]		0.00	1.03	3.05
	Min Torsion x	[kN]		-2.61	--	--
		[m]		0.00	--	--
Max Torsion x	[kN]		3.68	2.11	1.70	
	[m]		0.06	1.03	2.16	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.18	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	5.66	5.66	5.66
			Req.	4.58	4.58	4.58
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.06 mm, L/55186 (L: 3.05 m)		



2.46.- Frame 46



Frame 46			Span: V-285		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-23.74	--	-18.83
	x	[m]	0.00	--	3.05
	Max Moment	[kN·m]	7.77	8.11	--
	x	[m]	0.91	1.02	--
	Min Shear	[kN]	--	-12.36	-18.38
	x	[m]	--	1.96	2.66
	Max Shear	[kN]	57.01	8.92	--
	x	[m]	0.00	1.02	--
	Min Torsion	[kN]	--	--	-1.43
	x	[m]	--	--	2.89
	Max Torsion	[kN]	4.05	--	--
	x	[m]	0.00	--	--

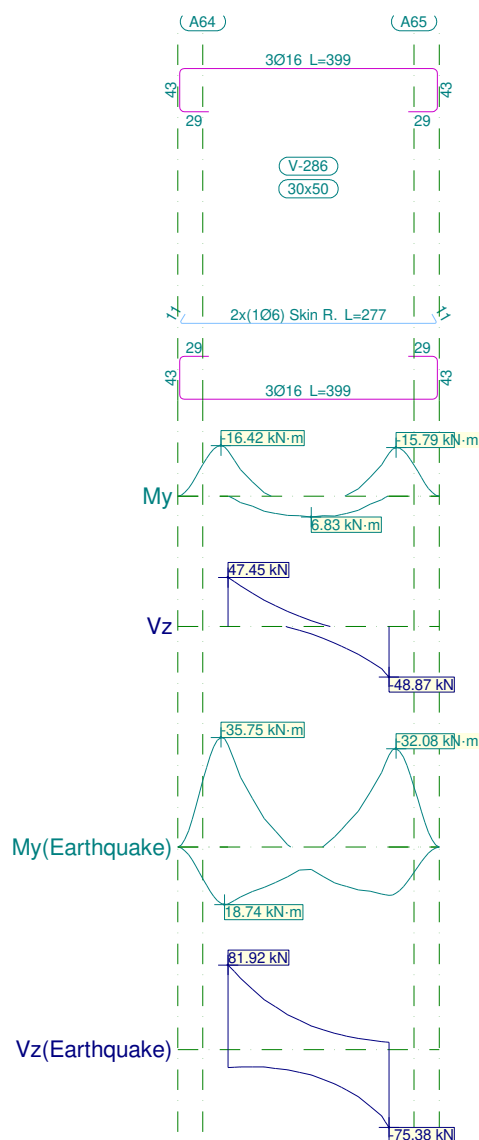


Beam reinforcement report

Frame 46				Span: V-285		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-43.44	-2.74	-29.14
		[m]		0.00	1.02	3.05
	Max Moment x	[kN·m]		15.65	13.03	2.28
		[m]		0.00	1.02	3.05
	Min Shear x	[kN]		-5.38	-18.78	-28.75
		[m]		0.91	1.96	3.05
	Max Shear x	[kN]		88.29	16.41	5.58
		[m]		0.00	1.02	3.05
	Min Torsion x	[kN]		--	--	-1.74
		[m]		--	--	2.89
Max Torsion x	[kN]		5.12	--	--	
	[m]		0.00	--	--	
Top Reinf. Area		[cm²]	Real	10.06	6.03	6.03
			Req.	5.83	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.03	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.03 mm, L/44730 (L: 1.33 m)		



2.47.- Frame 47



Frame 47			Span: V-286		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-14.75	--	-14.00
	x	[m]	0.00	--	1.60
	Max Moment	[kN·m]	5.65	6.83	5.97
	x	[m]	0.47	0.82	1.13
	Min Shear	[kN]	--	-16.10	-48.87
	x	[m]	--	1.06	1.60
	Max Shear	[kN]	47.45	14.70	--
	x	[m]	0.00	0.59	--
	Min Torsion	[kN]	--	--	-5.85
	x	[m]	--	--	1.52
	Max Torsion	[kN]	4.09	--	--
	x	[m]	0.00	--	--

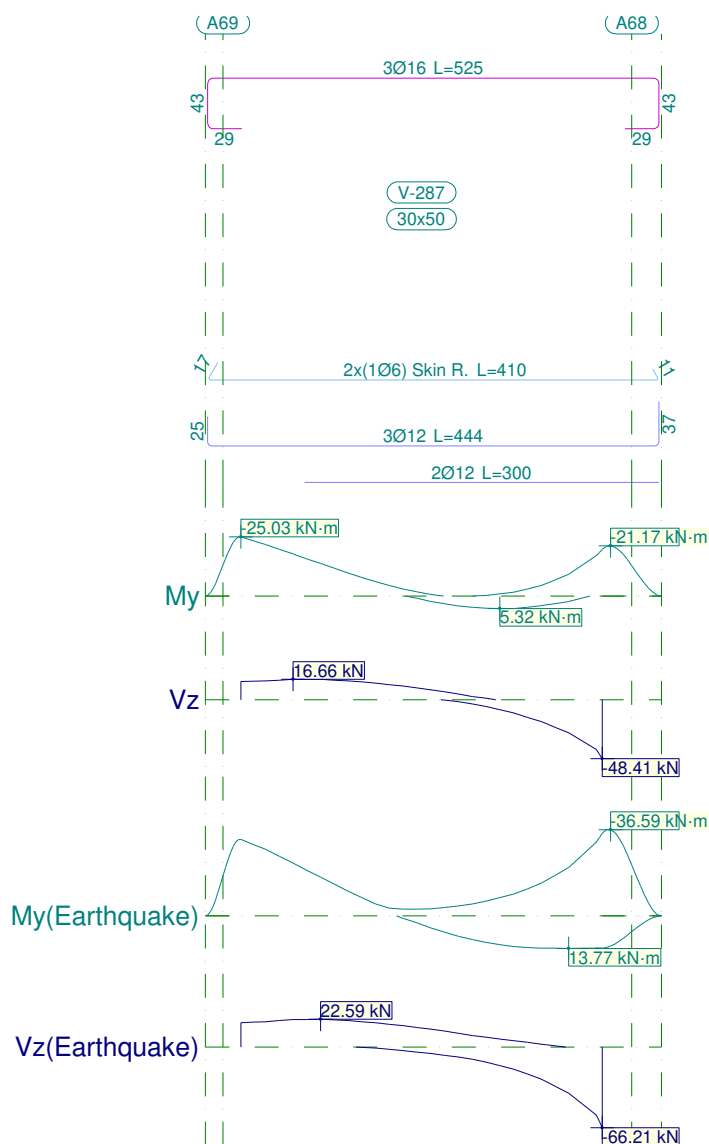


Beam reinforcement report

Frame 47				Span: V-286		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-33.34	-3.34	-29.99
		[m]		0.00	1.06	1.60
	Max Moment x	[kN·m]		18.49	11.63	15.73
		[m]		0.00	1.06	1.60
	Min Shear x	[kN]		-18.48	-33.23	-75.38
		[m]		0.47	1.06	1.60
	Max Shear x	[kN]		81.92	33.80	14.10
		[m]		0.00	0.59	1.13
	Min Torsion x	[kN]		--	--	-7.77
		[m]		--	--	1.52
Max Torsion x	[kN]		5.24	--	--	
	[m]		0.00	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.25	4.56	5.04
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.02 mm, L/70484 (L: 1.60 m)		



2.48.- Frame 48



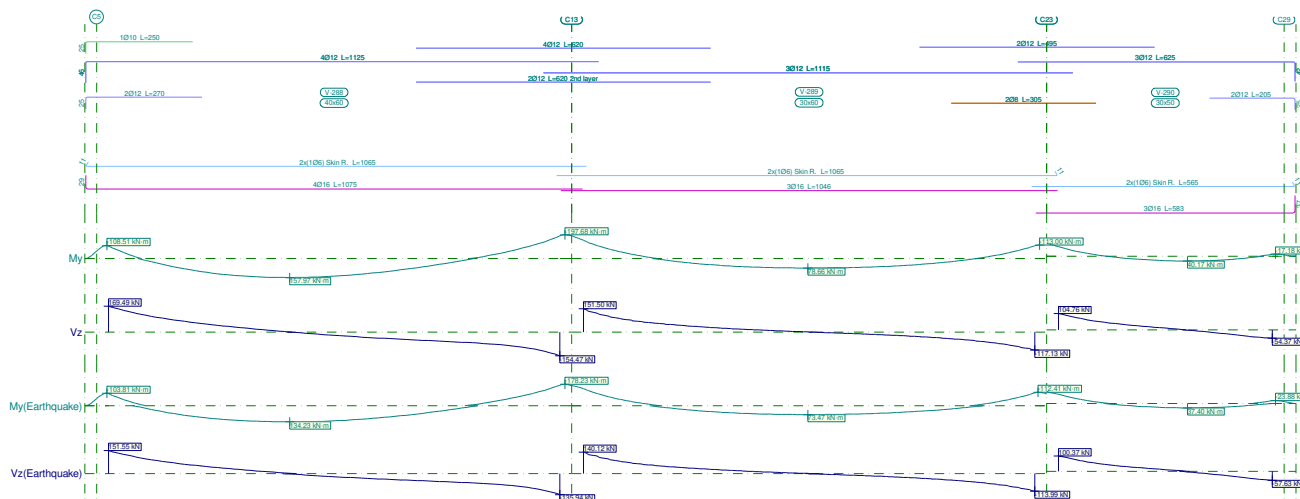
Frame 48			Span: V-287		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-25.03	-7.85	-19.72
	x	[m]	0.00	1.03	3.06
	Max Moment	[kN·m]	--	4.79	5.32
	x	[m]	--	1.96	2.19
	Min Shear	[kN]	--	-3.51	-48.41
	x	[m]	--	1.96	3.06
	Max Shear	[kN]	16.66	14.55	1.16
	x	[m]	0.44	1.03	2.08
	Min Torsion	[kN]	--	--	-4.66
	x	[m]	--	--	3.01
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--



Beam reinforcement report

Frame 48				Span: V-287		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-32.50	-7.75	-35.06
		[m]		0.00	1.03	3.06
	Max Moment x	[kN·m]		--	9.94	13.77
		[m]		--	1.96	2.78
	Min Shear x	[kN]		--	-10.18	-66.21
		[m]		--	1.96	3.06
	Max Shear x	[kN]		22.59	20.67	7.90
		[m]		0.68	1.03	2.08
	Min Torsion x	[kN]		--	--	-6.55
		[m]		--	--	3.01
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	5.30
Bot. Reinf. Area		[cm²]	Real	5.29	5.66	5.66
			Req.	3.02	4.58	4.58
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.24 mm, L/25873 (L: 6.12 m)		

2.49.- Frame 49



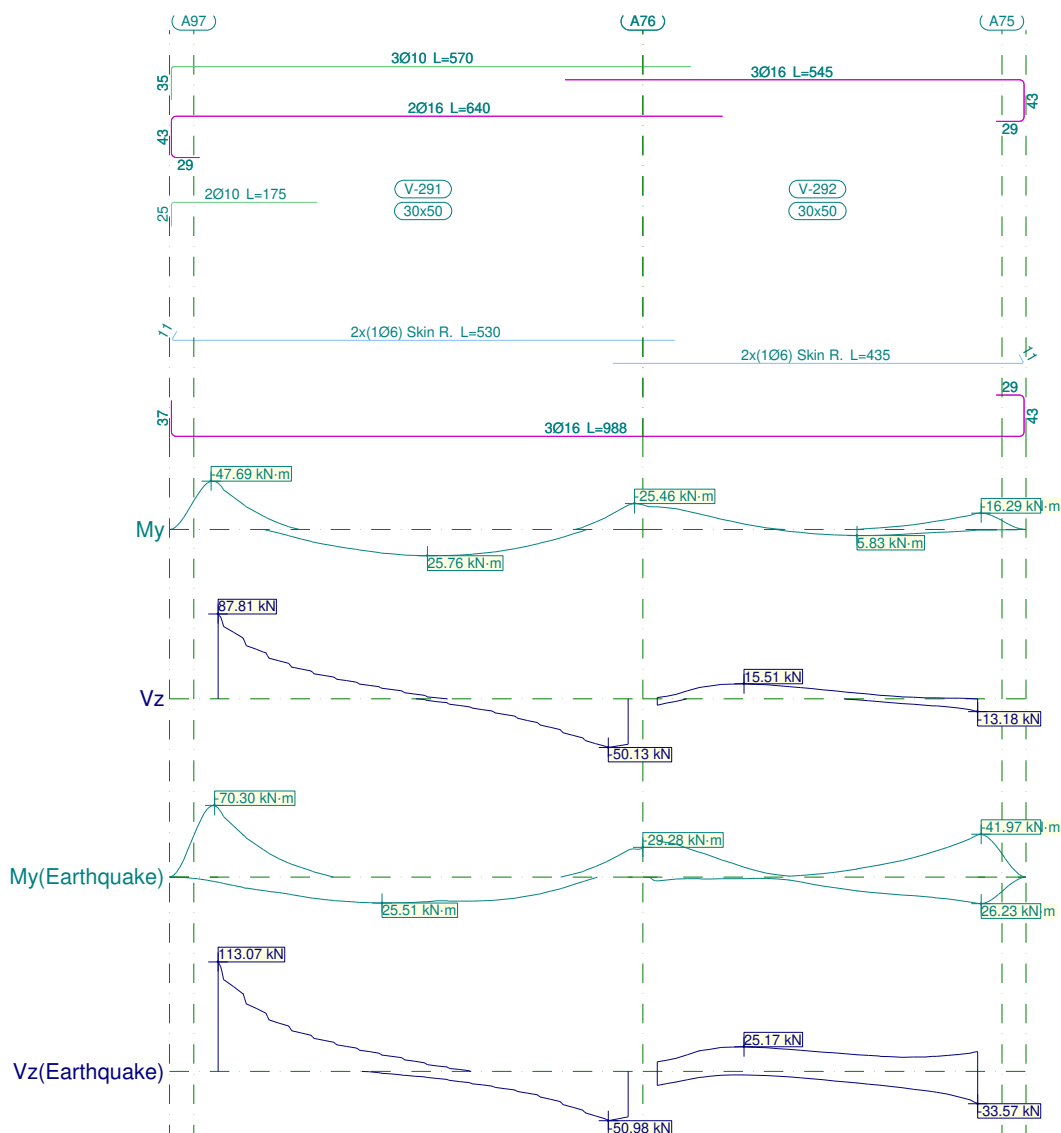


Beam reinforcement report

Frame 49				Span: V-288			Span: V-289			Span: V-290		
Section				40x60			30x60			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]		-104.82	--	-189.17	-151.81	--	-106.52	-79.38	--	-15.35
		x	[m]	0.00	--	9.50	0.00	--	9.50	0.00	--	4.50
	Max Moment	[kN·m]		151.89	157.97	81.84	62.83	78.66	65.60	17.88	40.17	38.33
		x	[m]	3.12	3.82	6.38	3.14	4.73	6.36	1.43	2.72	3.07
	Min Shear	[kN]		--	-48.00	-154.47	--	-16.92	-117.13	--	-8.65	-54.37
		x	[m]	--	6.27	9.50	--	6.27	9.50	--	2.95	4.50
	Max Shear	[kN]		169.49	16.06	--	151.50	20.57	--	104.76	29.14	--
		x	[m]	0.00	3.23	--	0.00	3.23	--	0.00	1.55	--
	Min Torsion	[kN]		-3.15	-1.76	--	-1.74	--	-2.22	--	--	--
		x	[m]	0.00	3.23	--	0.29	--	9.39	--	--	--
	Max Torsion	[kN]		--	--	4.76	2.71	2.65	2.06	--	--	--
		x	[m]	--	--	9.42	0.00	4.96	6.36	--	--	--
Seismic situations	Min Moment.	[kN·m]		-100.61	--	-171.84	-142.51	--	-107.95	-76.32	--	-22.09
		x	[m]	0.00	--	9.50	0.00	--	9.50	0.00	--	4.50
	Max Moment	[kN·m]		128.72	134.23	73.29	59.46	73.48	60.74	17.22	37.40	36.40
		x	[m]	3.12	3.82	6.38	3.14	4.73	6.36	1.43	2.72	3.07
	Min Shear	[kN]		--	-41.72	-135.94	--	-17.02	-113.99	--	-9.81	-57.63
		x	[m]	--	6.27	9.50	--	6.27	9.50	--	2.95	4.50
	Max Shear	[kN]		151.55	15.45	--	140.12	19.50	--	100.37	27.65	--
		x	[m]	0.00	3.23	--	0.00	3.23	--	0.00	1.55	--
	Min Torsion	[kN]		-3.46	--	--	-2.09	--	-2.53	--	--	--
		x	[m]	0.00	--	--	0.29	--	9.39	--	--	--
	Max Torsion	[kN]		--	--	5.24	3.35	2.68	2.15	--	--	--
		x	[m]	--	--	9.42	0.00	5.19	6.36	--	--	--
Top Reinf. Area		[cm²]	Real	7.57	4.52	13.35	12.68	3.39	8.77	8.49	5.28	5.66
			Req.	7.41	4.02	9.71	9.41	3.68	5.68	6.34	3.02	4.58
Bot. Reinf. Area		[cm²]	Real	8.04	8.04	8.04	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	7.58	7.61	7.38	6.34	5.54	5.54	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	2.98	2.46	2.46	2.46	2.46	2.46
			Req.	3.26	3.26	3.26	2.49	2.45	2.45	2.45	2.45	2.45
Active Defl.				5.23 mm, L/1815 (L: 9.50 m)			4.15 mm, L/2185 (L: 9.07 m)			0.80 mm, L/5204 (L: 4.18 m)		



2.50.- Frame 50



Frame 50			Span: V-291			Span: V-292		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-45.61	--	-23.94	-22.35	-1.64	-16.12
	x	[m]	0.00	--	4.23	0.00	1.13	3.30
	Max Moment	[kN·m]	18.09	25.76	22.17	--	5.83	5.62
	x	[m]	1.33	2.16	2.83	--	2.06	2.29
	Min Shear	[kN]	--	-11.02	-50.13	-6.39	-1.92	-13.18
	x	[m]	--	2.73	4.03	0.00	2.18	3.30
	Max Shear	[kN]	87.81	17.35	--	15.51	14.50	3.86
	x	[m]	0.00	1.43	--	0.89	1.13	2.29
	Min Torsion	[kN]	-8.14	-3.42	-3.26	-7.26	--	--
	x	[m]	0.03	1.43	3.53	0.00	--	--
	Max Torsion	[kN]	--	--	3.68	--	--	5.23
	x	[m]	--	--	4.03	--	--	3.23

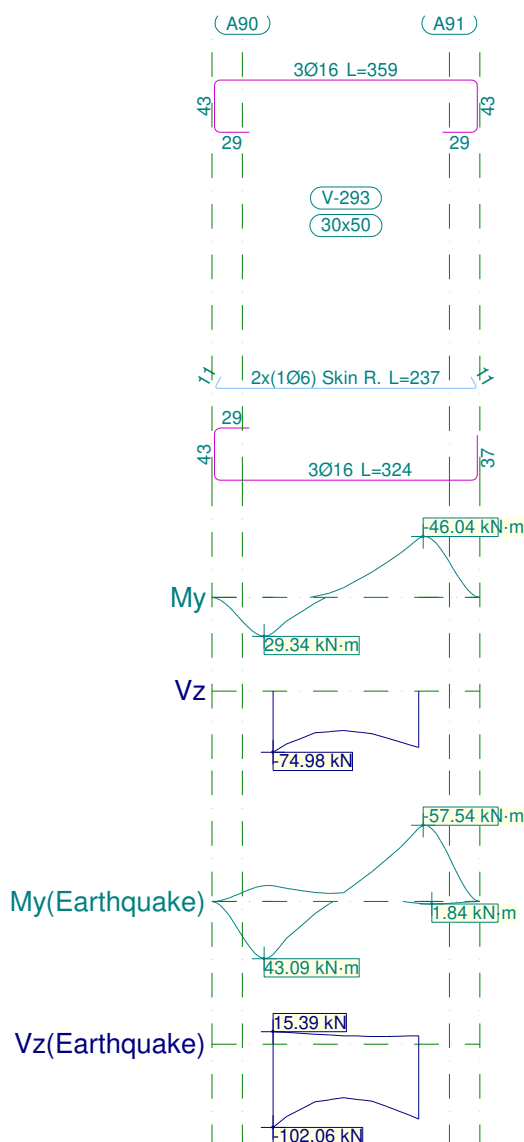


Beam reinforcement report

Frame 50				Span: V-291			Span: V-292		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-67.82	--	-26.43	-35.64	-9.92	-41.54
		[m]		0.00	--	4.23	0.00	2.18	3.30
	Max Moment x	[kN·m]		24.13	25.51	22.93	3.73	14.79	25.98
		[m]		1.33	1.69	2.83	0.00	2.18	3.30
	Min Shear x	[kN]		--	-14.13	-50.98	-14.70	-13.39	-33.57
		[m]		--	2.73	4.03	0.00	2.18	3.30
	Max Shear x	[kN]		113.07	24.09	--	25.17	24.30	20.44
		[m]		0.00	1.43	--	0.89	1.13	3.30
	Min Torsion x	[kN]		-9.41	-3.56	-3.74	-7.65	--	--
		[m]		0.03	1.43	3.53	0.00	--	--
	Max Torsion x	[kN]		--	--	3.84	--	--	6.05
		[m]		--	--	4.03	--	--	3.23
Top Reinf. Area		[cm²]	Real	7.95	6.38	11.54	11.32	6.03	6.03
			Req.	7.27	4.57	4.88	5.26	4.56	5.61
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03	6.03	6.03	6.03
			Req.	4.66	4.67	5.77	5.66	4.56	4.68
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33	3.33	3.33	3.33
			Req.	3.13	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.40 mm, L/10447 (L: 4.23 m)			0.06 mm, L/54008 (L: 3.30 m)		



2.51.- Frame 51



Frame 51			Span: V-293		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	--	-14.88	-44.56
	x	[m]	--	0.73	1.20
	Max Moment	[kN·m]	26.89	--	--
	x	[m]	0.00	--	--
	Min Shear	[kN]	-74.98	-50.73	-69.39
	x	[m]	0.00	0.73	1.20
	Max Shear	[kN]	--	--	--
	x	[m]	--	--	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

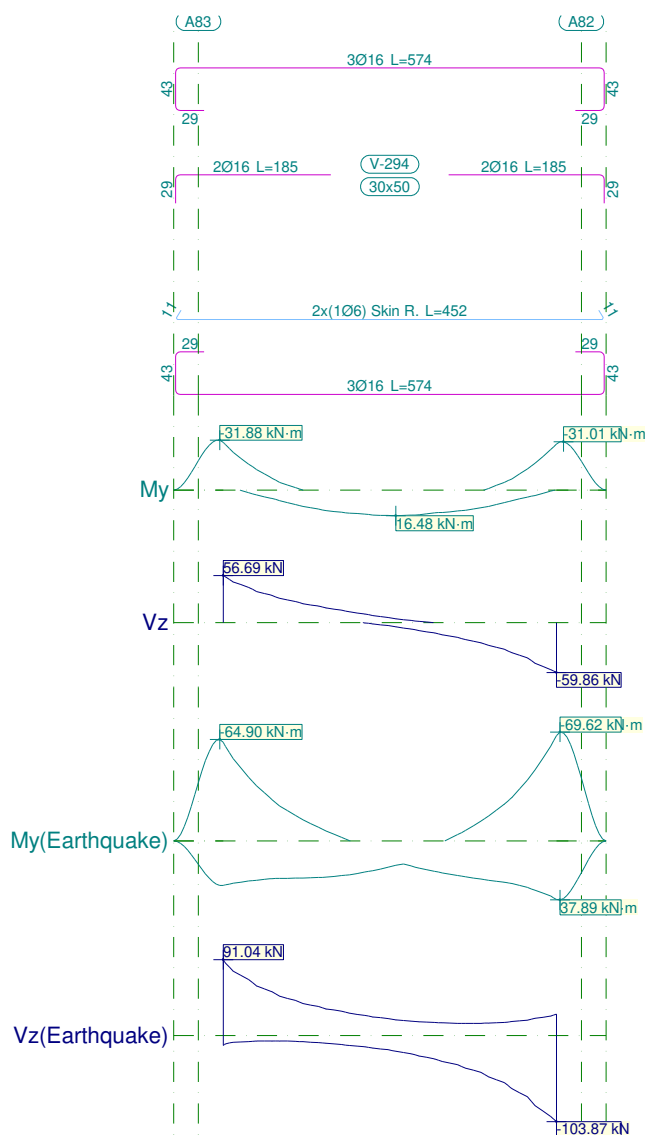


Beam reinforcement report

Frame 51				Span: V-293		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-11.87	-16.70	-55.53
		[m]		0.00	0.73	1.20
	Max Moment x	[kN·m]		39.95	1.63	--
		[m]		0.00	0.46	--
	Min Shear x	[kN]		-102.06	-68.29	-91.84
		[m]		0.00	0.73	1.20
	Max Shear x	[kN]		15.39	11.57	10.60
		[m]		0.00	0.46	1.20
	Min Torsion x	[kN]		-2.24	--	--
		[m]		0.00	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.02 mm, L/61040 (L: 1.20 m)		



2.52.- Frame 52



Frame 52			Span: V-294		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-30.58	--	-29.53
	x	[m]	0.00	--	3.35
	Max Moment	[kN·m]	13.70	16.48	13.93
	x	[m]	1.11	1.73	2.28
	Min Shear	[kN]	--	-14.72	-59.86
	x	[m]	--	2.20	3.35
	Max Shear	[kN]	56.69	14.99	--
	x	[m]	0.00	1.19	--
	Min Torsion	[kN]	--	--	-1.76
	x	[m]	--	--	3.13
	Max Torsion	[kN]	2.45	--	1.47
	x	[m]	0.02	--	3.06

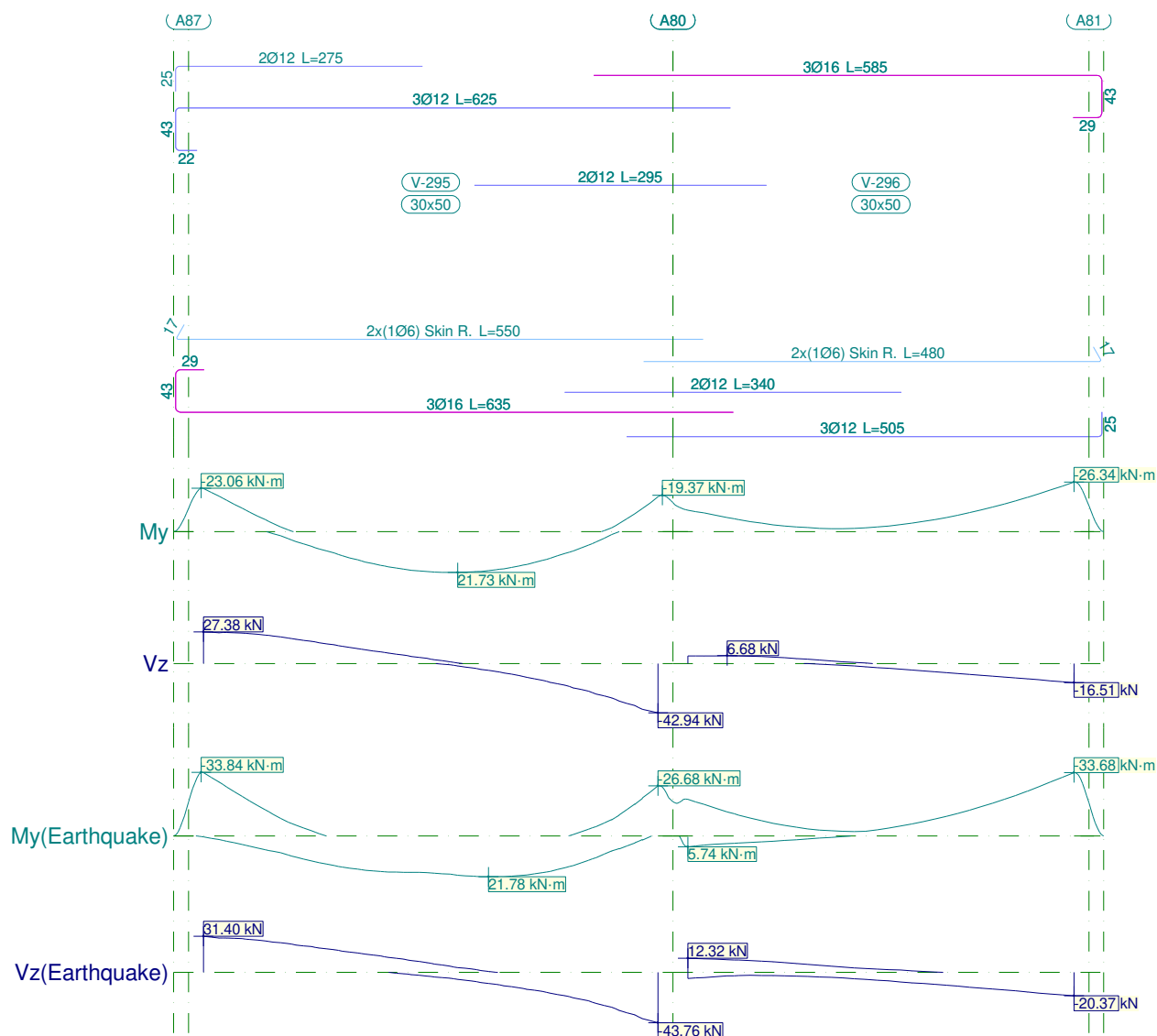


Beam reinforcement report

Frame 52				Span: V-294		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-63.03	-2.22	-67.43
	x	[m]		0.00	1.19	3.35
	Max Moment	[kN·m]		28.67	22.22	37.65
	x	[m]		0.00	1.19	3.35
	Min Shear	[kN]		-11.95	-31.27	-103.87
	x	[m]		0.00	2.20	3.35
	Max Shear	[kN]		91.04	28.98	25.74
	x	[m]		0.00	1.19	3.35
	Min Torsion	[kN]		-1.60	--	-2.26
	x	[m]		0.00	--	3.29
Max Torsion	[kN]		3.78	1.86	2.83	
	[m]		0.00	2.12	3.06	
Top Reinf. Area		[cm²]	Real	10.06	6.03	10.06
			Req.	6.97	4.56	7.25
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.03	4.56	5.36
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.17 mm, L/19539 (L: 3.35 m)		



2.53.- Frame 53



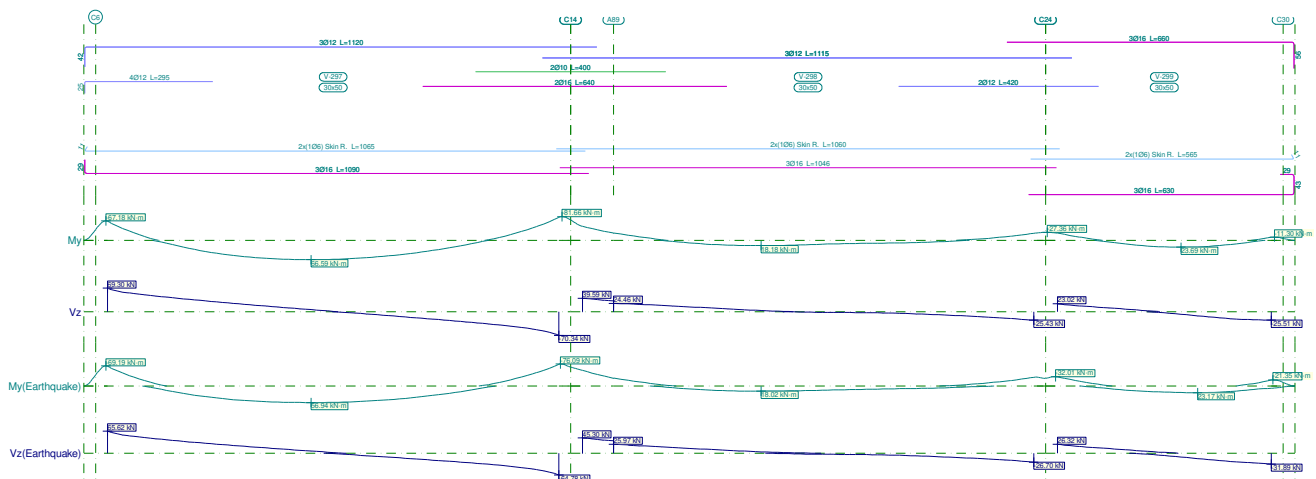
Frame 53			Span: V-295			Span: V-296		
Section			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-22.91	--	-18.54	-11.49	-6.42	-26.34
	x	[m]	0.00	--	4.59	0.00	2.50	3.90
	Max Moment	[kN·m]	13.94	21.73	19.00	--	--	--
	x	[m]	1.48	2.57	3.11	--	--	--
	Min Shear	[kN]	--	-8.24	-42.94	-0.15	-7.26	-16.51
	x	[m]	--	3.04	4.59	1.21	2.50	3.90
	Max Shear	[kN]	27.38	12.97	--	6.68	2.96	--
	x	[m]	0.00	1.56	--	0.40	1.33	--
	Min Torsion	[kN]	--	--	-1.80	--	--	--
	x	[m]	--	--	4.36	--	--	--
	Max Torsion	[kN]	--	--	--	2.40	--	--
	x	[m]	--	--	--	0.00	--	--



Beam reinforcement report

Frame 53				Span: V-295			Span: V-296		
Section				30x50			30x50		
Zone				1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Seismic situations	Min Moment.	[kN·m]		-33.75	--	-26.68	-19.48	-9.00	-33.68
		x	[m]	0.00	--	4.59	0.00	2.50	3.90
	Max Moment	[kN·m]		17.17	21.78	21.47	5.74	--	--
		x	[m]	1.48	2.88	3.11	0.00	--	--
	Min Shear	[kN]		--	-11.53	-43.76	-5.17	-10.44	-20.37
		x	[m]	--	3.04	4.59	0.00	2.50	3.90
	Max Shear	[kN]		31.40	16.92	--	12.32	6.28	--
		x	[m]	0.00	1.56	--	0.00	1.33	--
	Min Torsion	[kN]		--	--	-2.17	--	--	--
		x	[m]	--	--	4.36	--	--	--
	Max Torsion	[kN]		--	--	--	2.75	--	--
		x	[m]	--	--	--	0.00	--	--
Top Reinf. Area		[cm²]	Real	5.66	5.66	10.82	10.87	6.03	6.03
			Req.	4.58	4.58	5.37	5.22	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	10.74	10.44	5.66	3.39
			Req.	4.56	4.56	5.41	5.43	4.58	3.02
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46	2.46	2.46	2.46
			Req.	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.				0.45 mm, L/10276 (L: 4.59 m)			0.21 mm, L/18395 (L: 3.90 m)		

2.54.- Frame 54





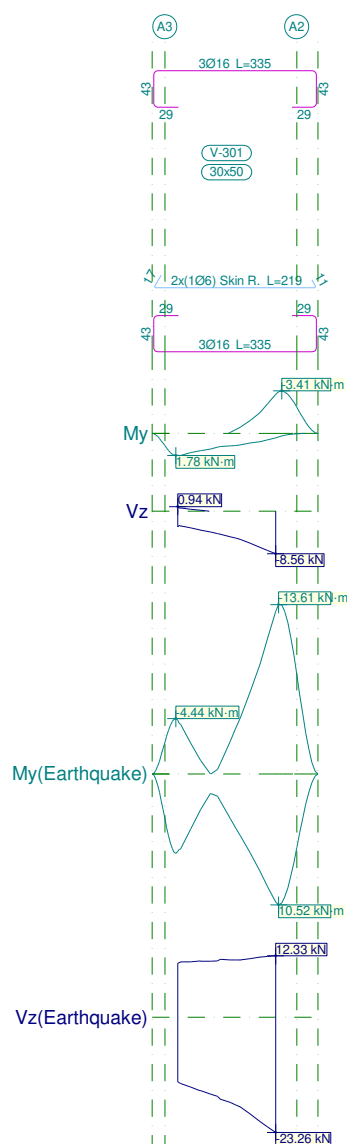
Beam reinforcement report

Frame 54			Span: V-297			Span: V-298			Span: V-299		
Section			30x50			30x50			30x50		
Zone			1/3L	2/3L	3/3L	1/3L	2/3L	3/3L	1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-66.0	--	-79.3	-47.8	--	-24.1	-24.8	--	-10.6
	x	[m]	0.00	--	9.50	0.00	--	9.50	0.00	--	4.50
	Max Moment	[kN·m]	59.46	66.59	44.93	16.52	18.18	9.35	12.26	23.69	21.73
	x	[m]	3.12	4.28	6.38	3.06	3.76	6.45	1.43	2.60	3.07
	Min Shear	[kN]	--	-15.7	-70.3	--	-3.8	-25.4	--	-12.4	-25.5
	x	[m]	--	6.27	9.50	--	6.33	9.50	--	2.95	4.50
	Max Shear	[kN]	69.30	17.56	--	39.59	7.11	--	23.02	6.31	--
	x	[m]	0.00	3.23	--	0.00	3.18	--	0.00	1.55	--
	Min Torsion	[kN]	-6.85	--	--	--	--	--	-3.31	-2.14	--
	x	[m]	0.00	--	--	--	--	--	0.00	1.55	--
Seismic situations	Min Moment.	[kN·m]	-68.1	--	-74.6	-53.6	--	-29.8	-31.4	--	-20.6
	x	[m]	0.00	--	9.50	0.00	--	9.50	0.00	--	4.50
	Max Moment	[kN·m]	52.26	56.94	40.71	16.33	18.02	10.16	14.17	23.17	22.89
	x	[m]	3.12	4.28	6.38	3.06	3.76	6.45	1.43	2.95	3.07
	Min Shear	[kN]	--	-14.9	-64.7	--	-4.9	-26.7	--	-15.8	-31.8
	x	[m]	--	6.27	9.50	--	6.33	9.50	--	2.95	4.50
	Max Shear	[kN]	65.62	16.75	--	45.30	7.76	--	26.32	9.18	--
	x	[m]	0.00	3.23	--	0.00	3.18	--	0.00	1.55	--
	Min Torsion	[kN]	-6.50	--	--	--	--	--	-3.23	-2.03	--
	x	[m]	0.00	--	--	--	--	--	0.00	1.55	--
Top Reinf. Area		[cm ²]	Real	7.92	3.39	11.03	10.80	3.39	10.13	10.12	6.03
			Req.	7.20	3.09	7.99	4.66	3.09	4.58	5.05	4.56
Bot. Reinf. Area		[cm ²]	Real	6.03	6.03	6.03	6.37	6.03	6.07	6.03	6.03
			Req.	4.66	4.66	5.51	5.40	4.56	5.07	5.06	4.56
Transv. Reinf. Area		[cm ² /m]	Real	3.33	3.33	3.33	2.46	2.46	2.46	3.33	3.33
			Req.	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
Active Defl.			5.00 mm, L/1899 (L: 9.50 m)			0.04 mm, L/12356 (L: 0.47 m)			0.47 mm, L/9564 (L: 4.50 m)		



3.- FLOOR 6

3.1.- Frame 1



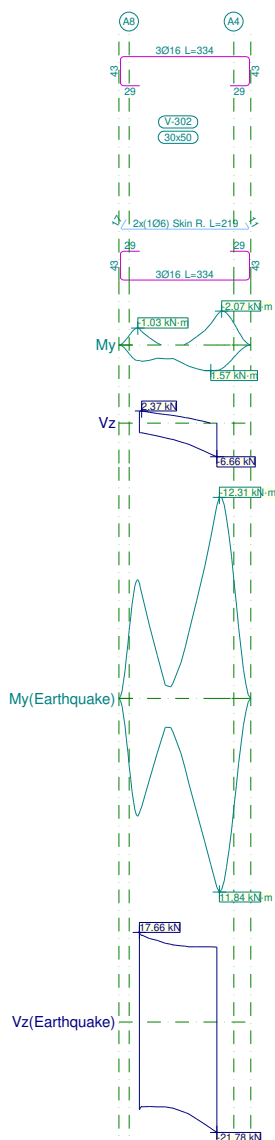


Beam reinforcement report

Frame 1				Span: V-301		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment. x	[kN·m]		--	--	-3.14
		[m]		--	--	1.15
	Max Moment x	[kN·m]		1.76	--	--
		[m]		0.04	--	--
	Min Shear x	[kN]		-3.76	-5.66	-8.56
		[m]		0.27	0.74	1.15
	Max Shear x	[kN]		0.94	--	--
		[m]		0.00	--	--
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Seismic situations	Min Moment. x	[kN·m]		-4.32	-4.48	-13.09
		[m]		0.00	0.74	1.15
	Max Moment x	[kN·m]		6.23	4.93	10.29
		[m]		0.00	0.74	1.15
	Min Shear x	[kN]		-14.88	-18.06	-23.26
		[m]		0.27	0.74	1.15
	Max Shear x	[kN]		11.32	11.65	12.33
		[m]		0.27	0.50	1.15
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.15 m)		



3.2.- Frame 2



Frame 2			Span: V-302		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	--	--	-1.82
	x	[m]	--	--	1.15
	Max Moment	[kN·m]	--	--	1.57
	x	[m]	--	--	1.06
	Min Shear	[kN]	-2.89	-4.18	-6.66
	x	[m]	0.38	0.73	1.15
	Max Shear	[kN]	2.37	1.71	0.63
	x	[m]	0.03	0.38	0.85
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--

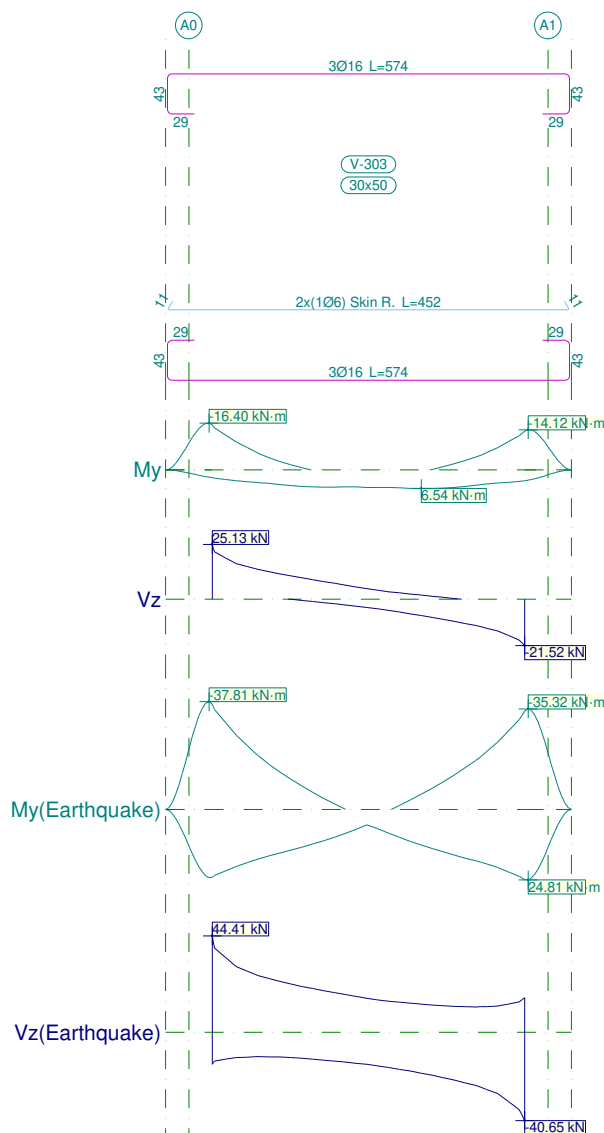


Beam reinforcement report

Frame 2				Span: V-302		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-7.07	-4.02	-11.81
		[m]		0.00	0.73	1.15
	Max Moment x	[kN·m]		7.01	5.16	11.55
		[m]		0.00	0.73	1.15
	Min Shear x	[kN]		-17.30	-18.08	-21.78
		[m]		0.00	0.73	1.15
	Max Shear x	[kN]		17.66	15.53	14.87
		[m]		0.00	0.38	0.97
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.00 mm, <L/1000 (L: 1.15 m)		



3.3.- Frame 3



Frame 3			Span: V-303		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-15.86	--	-13.66
	x	[m]	0.00	--	3.35
	Max Moment	[kN·m]	5.95	6.49	6.54
	x	[m]	1.07	2.12	2.24
	Min Shear	[kN]	-1.13	-6.80	-21.52
	x	[m]	1.07	2.12	3.35
	Max Shear	[kN]	25.13	8.10	1.80
	x	[m]	0.00	1.19	2.24
	Min Torsion	[kN]	--	--	-1.80
	x	[m]	--	--	3.29
	Max Torsion	[kN]	2.81	--	--
	x	[m]	0.00	--	--

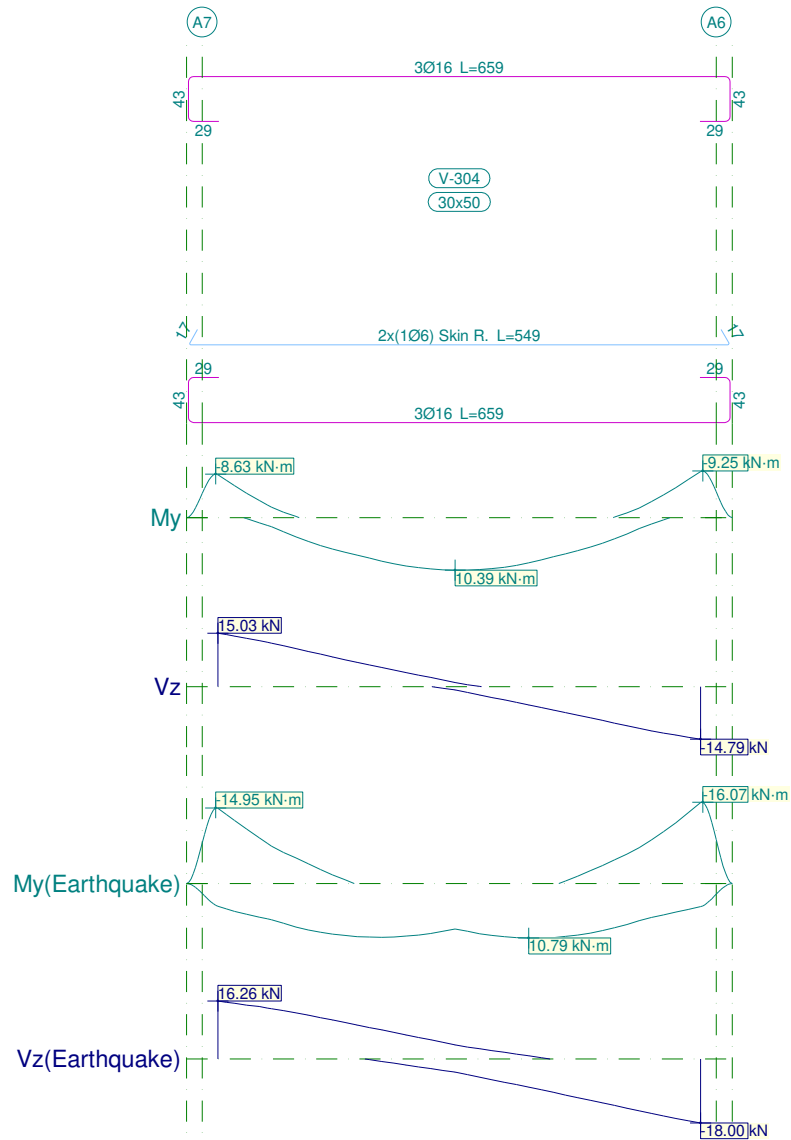


Beam reinforcement report

Frame 3				Span: V-303		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-36.99	-3.96	-34.57
		[m]		0.00	1.19	3.35
	Max Moment x	[kN·m]		23.84	11.24	24.68
		[m]		0.00	2.12	3.35
	Min Shear x	[kN]		-14.74	-17.88	-40.65
		[m]		0.00	2.12	3.35
	Max Shear x	[kN]		44.41	19.22	15.95
		[m]		0.00	1.19	3.35
	Min Torsion x	[kN]		--	--	-3.43
		[m]		--	--	3.29
Max Torsion x	[kN]		4.07	--	--	
	[m]		0.00	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	5.37	4.56	5.23
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.61
Transv. Reinf. Area		[cm²/m]	Real	3.33	3.33	3.33
			Req.	2.45	2.45	2.45
Active Defl.				0.04 mm, L/85181 (L: 3.35 m)		



3.4.- Frame 4



Frame 4			Span: V-304		
Section			30x50		
Zone			1/3L	2/3L	3/3L
Persistent or transient situations	Min Moment.	[kN·m]	-8.48	--	-9.12
	x	[m]	0.00	--	4.59
	Max Moment	[kN·m]	7.96	10.39	8.38
	x	[m]	1.44	2.26	3.08
	Min Shear	[kN]	--	-5.18	-14.79
	x	[m]	--	2.96	4.59
	Max Shear	[kN]	15.03	5.40	--
	x	[m]	0.00	1.56	--
	Min Torsion	[kN]	--	--	--
	x	[m]	--	--	--
	Max Torsion	[kN]	--	--	--
	x	[m]	--	--	--



Beam reinforcement report

Frame 4				Span: V-304		
Section				30x50		
Zone				1/3L	2/3L	3/3L
Seismic situations	Min Moment. x	[kN·m]		-14.87	--	-15.97
		[m]		0.00	--	4.59
	Max Moment x	[kN·m]		10.60	10.79	10.77
		[m]		1.44	2.96	3.08
	Min Shear x	[kN]		-0.18	-7.98	-18.00
		[m]		1.44	2.96	4.59
	Max Shear x	[kN]		16.26	8.15	0.36
		[m]		0.00	1.56	3.08
	Min Torsion x	[kN]		--	--	--
		[m]		--	--	--
Max Torsion x	[kN]		--	--	--	
	[m]		--	--	--	
Top Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Bot. Reinf. Area		[cm²]	Real	6.03	6.03	6.03
			Req.	4.56	4.56	4.56
Transv. Reinf. Area		[cm²/m]	Real	2.46	2.46	2.46
			Req.	2.45	2.45	2.45
Active Defl.				0.15 mm, L/30052 (L: 4.59 m)		

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Column, shear wall and wall forces and reinforcement

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Date: 11/20/20

1.- MATERIALS

1.1.- Concrete types

Element	Concrete	f_{ck} (MPa)	γ_c	Maximum size of the aggregate (mm)
All	H-20	20	1.00	15

1.2.- Steel types by element and position

1.2.1.- Steel in bars

Element	Steel	f_{yk} (MPa)	γ_s
All	ADN 420	420	1.00

1.2.2.- Steel in sections

Type of steel for sections	Steel	Yield Strength (MPa)	Modulus of Elasticity (GPa)
Cold formed steel	ASTM A 36 36 ksi	250	203
Rolled steel	ASTM A 36 36 ksi	250	200

2.- COLUMN AND SHEAR WALL REINFORCEMENT

2.1.- Columns

Column reinforcement																		
Concrete: H-20																		
Column	Geometry			Reinforcement										Worst case forces				
	Floor	Dimensions (cm)	Span (m)	Bars				Stirrups			Spacing (cm)	Nature	N (kN)	Mxx (kN-m)	Myx (kN-m)	Qx (kN)	Qy (kN)	Use (%)
				Corner	X Face	Y Face	Steel area (%)	Perimeter	X-Dir. ⁽¹⁾	Y-Dir. ⁽¹⁾								
C1	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08			18	DL, LL, E	175.5	-107.9	-96.7	-69.0	77.7	92.9
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08			18	DL, LL, E	410.0	113.6	81.5	-69.6	92.2	76.4
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08			24	DL, LL	791.9	120.0	115.5	-94.8	98.9	73.3
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08			24	DL, LL	1115.4	-133.1	-126.3	-100.8	106.1	83.8
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08			24	DL, LL	1115.4	-133.1	-126.3	-100.8	106.1	83.8
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1418.0	-65.8	-64.1	-71.1	74.6	59.1
C2	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08			18	DL, LL	397.1	-220.5	14.3	10.9	149.2	90.6
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08			18	DL, LL, E	765.6	181.6	-6.3	5.5	149.9	98.9
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1505.8	222.8	-11.8	9.5	184.1	91.9
	Floor 2	50x50	3.00/5.40	4020	10012	10012	1.41	1s08	2c08	2c08	14	DL, LL	2086.8	-247.7	13.8	10.7	198.3	99.8
	Floor 1	50x50	0.00/2.40	4025	6016	6016	1.75	1s08	1c08	1c08	19	DL, LL	2631.2	208.2	-12.7	8.4	138.1	97.8
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	2648.9	-123.2	7.5	8.4	138.1	98.1
C3	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08			18	DL, LL	379.6	-221.3	-3.7	-2.9	150.9	91.6
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08			18	DL, LL	912.1	223.7	1.7	-1.6	186.5	96.4
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08			24	DL, LL	1460.8	220.0	2.2	-1.8	181.7	89.4
	Floor 2	50x50	3.00/5.40	4025	2020	2020	1.29	1s08	-	-	24	DL, LL	2027.0	-242.4	-2.1	-1.6	194.3	99.0
	Floor 1	50x50	0.00/2.40	4020	4020	4020	1.51	1s08	2c08	2c08	24	DL, LL	2552.6	202.6	1.7	-1.2	134.5	100.0
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	2570.2	-120.2	-1.2	-1.2	134.5	95.2
C4	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08			18	DL, LL	384.0	-222.5	0.4	0.6	151.9	92.2
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08			18	DL, LL	918.7	224.2	1.2	-0.9	187.0	96.2
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08			24	DL, LL	1469.7	220.9	0.3	-0.4	182.4	89.7
	Floor 2	50x50	3.00/5.40	4025	2020	2020	1.29	1s08			24	DL, LL	2038.5	-244.5	-1.0	-0.7	195.6	99.6
	Floor 1	50x50	0.00/2.40	4025	2025	2025	1.57	1s08			30	DL, LL	2568.3	204.8	0.7	-0.5	136.2	99.4
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	2585.9	-121.9	-0.6	-0.5	136.2	95.9
C5	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08			18	DL, LL, E	322.3	-152.9	-1.1	-1.7	107.5	95.1
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08			24	DL, LL	866.9	191.5	-5.1	3.6	159.2	94.7
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08			24	DL, LL	1387.4	185.9	-2.3	2.0	153.8	78.6
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1926.5	-208.0	1.5	1.6	166.4	96.0
	Floor 1	50x50	0.00/2.40	4020	6012	6012	1.05	1s08	1c08	1c08	14	DL, LL	2428.9	174.0	-0.4	0.2	115.8	99.3
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	2446.6	-103.8	0.1	0.2	115.8	89.4
C6	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08			18	DL, LL	158.6	70.2	-69.2	71.5	70.9	96.1
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08			24	DL, LL	176.3	-99.9	102.4	71.5	70.9	61.5
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08			24	DL, LL	704.9	93.4	-98.1	80.5	76.7	60.6
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08			24	DL, LL	995.5	-103.5	107.0	85.5	81.9	68.9
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08			24	DL, LL	995.5	-103.5	107.0	85.5	81.9	68.9
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1265.8	-52.7	54.1	60.3	58.7	51.2



Column, shear wall and wall forces and reinforcement

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Column reinforcement																				
Concrete: H-20																				
Column	Geometry			Reinforcement							Worst case forces							Use (%)	Status	
	Floor	Dimensions (cm)	Span (m)	Bars				Stirrups			Nature	N (kN)	Mxx (kN-m)	Myx (kN-m)	Qx (kN)	Qy (kN)				
				Corner	X Face	Y Face	Steel area (%)	Perimeter	X-Dir. ⁽¹⁾	Y-Dir. ⁽¹⁾										
C7	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	254.3	70.1	-84.3	-60.3	-44.6	70.9	Verified	
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	439.0	-113.6	44.2	-38.1	-91.6	69.5	Verified	
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	663.0	-121.6	47.7	-38.6	-99.4	55.4	Verified	
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	897.0	133.6	-43.3	-36.0	-108.3	60.4	Verified	
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	897.0	133.6	-43.3	-36.0	-108.3	60.4	Verified	
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1508.1	44.3	-31.7	-35.4	-47.7	55.1	Verified	
C8	techo	40x30	12.00/14.40	4016	2016	-	1.01	1s06	-	-	19	DL, LL	409.2	12.5	1.1	1.1	-4.0	32.0	Verified	
	Floor 4	40x30	9.00/11.40	4016	2016	-	1.01	1s06	-	-	19	DL, LL	762.5	-35.9	0.0	0.1	-23.9	67.3	Verified	
	Floor 3	40x30	6.00/8.50	4016	2016	-	1.01	1s06	-	-	19	DL, LL	1145.7	34.6	1.4	1.0	-20.4	89.1	Verified	
	Floor 2	40x30	3.00/5.50	4020	4020	-	2.09	1s08	-	-	2c08	24	DL, LL	1532.7	50.6	2.9	2.0	-21.9	100.0	Verified
	Floor 1	40x30	0.00/2.50	4025	6025	-	4.09	1s08	-	-	1c08	30	DL, LL	1945.2	71.5	1.7	1.8	-14.0	98.2	Verified
	Foundations	-	-	4025	6025	-	4.09	1s08	-	-	1c08	-	DL, LL	1945.2	71.5	1.7	1.8	-14.0	98.2	Verified
C9	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	437.8	127.4	42.0	28.6	-80.7	76.9	Verified	
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	895.6	-158.1	-41.4	33.8	-130.0	67.4	Verified	
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1369.1	-146.2	-36.1	29.3	-120.9	70.8	Verified	
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1859.8	158.5	27.8	23.9	-128.4	84.5	Verified	
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	2321.4	-128.5	-18.7	12.6	-86.4	90.3	Verified	
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	2339.0	78.8	11.4	12.6	-86.4	85.5	Verified	
C10	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	18	DL, LL, E	343.5	145.9	-19.2	-14.0	-95.4	84.4	Verified	
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	18	DL, LL	740.0	-193.4	14.7	-12.2	-158.8	86.0	Verified	
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	18	DL, LL, E	715.5	-186.2	16.2	-12.8	-153.5	73.2	Verified	
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08	-	-	24	DL, E	500.3	142.1	-8.7	-7.6	-117.2	92.1	Verified	
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	2085.1	-118.7	3.1	-1.9	-79.7	81.2	Verified	
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	2102.7	72.6	-1.6	-1.9	-79.7	76.8	Verified	
C11	techo	40x30	12.00/14.50	4016	2016	-	1.01	1s06	-	-	19	DL, LL	323.1	22.3	-1.5	-0.9	-12.4	34.1	Verified	
	Floor 4	40x30	9.00/11.50	4016	2016	-	1.01	1s06	-	-	19	DL, LL	640.7	-33.6	1.9	-1.5	-23.4	59.2	Verified	
	Floor 3	40x30	6.00/8.50	4016	2016	-	1.01	1s06	-	-	19	DL, LL	983.7	31.7	-1.2	-1.0	-21.1	77.8	Verified	
	Floor 2	40x30	3.00/5.50	4020	2012	-	1.24	1s08	-	-	14	DL, LL	1328.6	41.8	-0.6	-0.6	-21.5	99.9	Verified	
	Floor 1	40x30	0.00/2.50	4020	6020	2016	2.95	1s08	-	-	1c08	19	DL, LL	1691.6	58.2	-0.1	-0.2	-13.5	98.8	Verified
	Foundations	-	-	4020	6020	2016	2.95	1s08	-	-	1c08	-	DL, LL	1691.6	58.2	-0.1	-0.2	-13.5	98.8	Verified
C12	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	424.9	148.0	20.2	14.6	-96.8	94.8	Verified	
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	895.0	-168.3	-15.3	12.6	-138.8	65.9	Verified	
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1385.0	-158.2	-13.6	10.8	-130.4	71.9	Verified	
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1897.0	165.4	7.2	6.7	-134.7	85.6	Verified	
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	2391.1	-132.8	-3.3	2.3	-88.9	92.5	Verified	
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	2408.7	80.6	2.2	2.3	-88.9	88.0	Verified	
C13	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	320.9	53.3	-13.5	-9.5	-33.2	22.9	Verified	
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	572.3	-86.4	20.6	-16.5	-69.1	37.5	Verified	
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1119.9	69.8	4.5	3.8	-58.7	44.9	Verified	
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1512.9	77.4	5.0	4.1	-62.8	57.4	Verified	
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1922.4	38.7	2.6	2.7	-42.5	70.2	Verified	
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1922.4	38.7	2.6	2.7	-42.5	70.2	Verified	
C14	techo	50x50	12.00/14.50	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	107.0	57.6	-3.5	-2.2	-39.5	35.3	Verified	
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	208.1	-74.2	12.2	-9.2	-57.1	48.6	Verified	
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	312.3	-79.0	15.6	-12.4	-61.9	45.6	Verified	
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08	-	-	24	DL, E	220.9	70.6	-19.8	-15.4	-53.4	44.9	Verified	
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	1154.8	2.9	39.7	27.3	-8.5	42.6	Verified	
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL, E	1154.8	2.9	39.7	27.3	-8.5	42.6	Verified	
C15	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	226.3	-2.9	-123.1	-94.2	2.3	94.5	Verified	
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	226.3	-2.9	-123.1	-94.2	2.3	40.7	Verified	
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	571.8	75.6	73.6	-59.2	61.8	47.5	Verified	
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	775.1	-84.3	-71.5	-57.1	68.5	51.3	Verified	
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	775.1	-84.3	-71.5	-57.1	68.5	51.3	Verified	
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL, E	951.2	-75.7	-41.1	-40.1	55.1	45.7	Verified	
C16	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	347.9	-7.0	89.5	65.5	5.0	56.2	Verified	
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	347.9	-7.0	89.5	65.5	5.0	33.6	Verified	
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	941.7	-6.3	67.8	55.4	4.9	39.8	Verified	
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1239.0	-9.4	68.2	53.6	6.6	48.2	Verified	
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	1528.0	-3.8	30.9	33.4	5.3	55.8	Verified	
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1528.0	-3.8	30.9	33.4	5.3	55.8	Verified	
C17	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL	208.4	4.5	-78.2	-58.1	-2.8	56.6	Verified	
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08	-	-	24	DL, E	231.2	-62.1	13.4	-13.3	-49.5	38.3	Verified	
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	538.3	71.3	53.9	-43.3	58.3	40.5	Verified	
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08	-	-	24	DL, LL, E	735.1	-79.2	-50.0	-40.5	64.5	44.2	Verified	



Column, shear wall and wall forces and reinforcement

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Column reinforcement																		
Concrete: H-20																		
Column	Geometry			Reinforcement								Worst case forces						
	Floor	Dimensions (cm)	Span (m)	Bars				Stirrups				Nature	N (kN)	Mxx (kN-m)	Myx (kN-m)	Qx (kN)	Qy (kN)	Use (%)
				Corner	X Face	Y Face	Steel area (%)	Perimeter	X-Dir. ⁽¹⁾	Y-Dir. ⁽¹⁾	Spacing (cm)							
	Floor 1	30x30	0.00/2.50	4025	4020	4020	4.97	1s08	2c08	2c08	24	DL, LL	1280.7	-44.2	44.2	0.0	1.1	94.4
	Foundations	-	-	4025	4020	4020	4.97	1s08	2c08	2c08	-	DL, LL	1280.7	-44.2	44.2	0.0	1.1	94.4
C22	techo	50x50	12.00/14.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	284.3	-37.9	33.7	23.4	26.7	22.9
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	476.4	43.4	-43.0	32.8	34.0	29.1
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	684.8	46.0	-45.0	35.1	36.2	34.0
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08			24	DL, LL	1220.5	-20.6	8.6	7.6	16.4	44.6
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08			24	DL, LL	1518.6	-7.8	3.0	2.9	9.2	55.5
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1518.6	-7.8	3.0	2.9	9.2	55.5
C23	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08			24	DL, LL, E	334.2	42.0	-27.7	-18.9	-29.9	23.0
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	516.6	-50.2	41.4	-32.2	-39.0	31.0
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	716.8	-57.5	47.3	-37.5	-45.3	37.7
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08			24	DL, LL	1241.4	28.6	-2.4	-1.9	-22.2	45.4
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08			24	DL, LL	1549.8	14.2	-0.7	-1.2	-15.1	56.6
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1549.8	14.2	-0.7	-1.2	-15.1	56.6
C24	techo	50x50	12.00/14.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	63.2	19.9	-5.7	5.5	15.4	12.9
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08			24	DL, E	78.9	-40.5	7.7	-5.9	-29.4	26.2
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08			24	DL, E	95.4	-42.8	13.9	-11.4	-33.4	29.6
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08			24	DL, E	94.6	45.6	-23.9	-17.6	-34.2	32.8
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	885.2	-5.4	42.3	28.7	1.0	33.1
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL, E	885.2	-5.4	42.3	28.7	1.0	33.1
C25	techo	50x50	12.00/14.40	4020	2020	2020	1.01	1s08			24	DL, LL	144.0	25.3	-92.4	-69.8	-17.4	71.2
	Floor 4	50x50	9.00/11.40	4020	2020	2020	1.01	1s08			24	DL, LL	144.0	25.3	-92.4	-69.8	-17.4	36.7
	Floor 3	50x50	6.00/8.40	4020	2020	2020	1.01	1s08			24	DL, LL, E	467.9	-63.3	50.5	-41.5	-50.7	36.6
	Floor 2	50x50	3.00/5.40	4020	2020	2020	1.01	1s08			24	DL, LL, E	666.9	68.8	-50.7	-41.0	-55.6	40.5
	Floor 1	50x50	0.00/2.40	4020	2020	2020	1.01	1s08			24	DL, LL, E	666.9	68.8	-50.7	-41.0	-55.6	40.5
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL, E	841.0	71.2	-11.9	-25.5	-48.0	38.1
C26	techo	50x50	12.00/14.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	265.3	47.8	10.7	8.3	-35.0	20.0
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	501.1	-51.0	-14.3	10.6	-39.3	25.5
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	761.2	-59.9	-17.9	13.5	-46.2	34.2
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08			24	DL, LL	1168.7	41.0	3.2	2.5	-31.8	42.7
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08			24	DL, LL	1460.7	20.6	2.0	1.6	-21.2	53.4
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1460.7	20.6	2.0	1.6	-21.2	53.4
C27	techo	50x50	12.00/14.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	273.3	50.4	4.8	3.7	-38.0	19.9
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08			24	DL, LL	592.3	37.1	-1.9	-1.5	-28.8	23.7
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08			24	DL, LL	890.3	37.9	-1.2	-1.1	-31.0	32.5
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08			24	DL, LL	1187.7	42.5	0.5	0.1	-32.9	43.4
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08			24	DL, LL	1482.1	21.3	1.1	0.7	-22.3	54.2
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1482.1	21.3	1.1	0.7	-22.3	54.2
C28	techo	50x50	12.00/14.50	4020	2020	2020	1.01	1s08			24	DL, LL	291.2	48.6	5.1	3.9	-35.3	19.7
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08			24	DL, LL	590.5	37.4	3.0	2.3	-29.0	23.8
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08			24	DL, LL	887.6	38.1	2.6	2.2	-31.2	32.4
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08			24	DL, LL	1183.7	42.1	1.2	1.1	-32.6	43.3
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08			24	DL, LL	1476.6	20.7	0.7	0.3	-21.9	54.0
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1476.6	20.7	0.7	0.3	-21.9	54.0
C29	techo	50x50	12.00/14.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	262.4	41.0	-16.0	-13.2	-30.4	19.1
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	489.2	-42.9	17.3	-13.2	-33.1	23.8
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08			24	DL, LL, E	738.7	-49.2	23.1	-17.7	-38.3	31.9
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08			24	DL, LL	1137.5	34.2	-2.6	-1.8	-26.6	41.6
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08			24	DL, LL	1422.2	16.7	-1.1	-1.7	-17.8	52.0
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL	1422.2	16.7	-1.1	-1.7	-17.8	52.0
C30	techo	50x50	12.00/14.50	4020	2020	2020	1.01	1s08			24	DL, LL	143.7	18.1	91.1	67.9	-13.1	69.1
	Floor 4	50x50	9.00/11.50	4020	2020	2020	1.01	1s08			24	DL, LL	143.7	18.1	91.1	67.9	-13.1	34.3
	Floor 3	50x50	6.00/8.50	4020	2020	2020	1.01	1s08			24	DL, LL	455.3	-16.7	-74.8	58.4	-12.9	31.8
	Floor 2	50x50	3.00/5.50	4020	2020	2020	1.01	1s08			24	DL, LL	640.0	18.8	80.1	61.0	-14.5	36.6
	Floor 1	50x50	0.00/2.50	4020	2020	2020	1.01	1s08			24	DL, LL	640.0	18.8	80.1	61.0	-14.5	36.6
	Foundations	-	-	4020	2020	2020	1.01	1s08	-	-	-	DL, LL, E	612.8	-26.6	59.4	44.6	9.5	31.8
Notes: ⁽¹⁾ s = stirrup, c = cross tie																		

3.- FORCES IN COLUMNS, SHEAR WALLS AND WALLS BY LOADCASE

▪ Span: Initial level / final level of the span between floors.

▪ Note:

The forces refer to the local axes of the column.



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C1	techo	50x50	12.00/14.40	Self weight	130.5	62.1	63.2	47.0	47.6	0.0	115.8	-50.7	-50.9	47.0	47.6	0.0
				Dead load	4.2	9.0	8.9	4.6	3.9	-0.0	4.2	-2.0	-0.5	4.6	3.9	-0.0
				Live load	21.7	22.5	22.2	14.1	13.8	0.0	21.7	-11.4	-10.9	14.1	13.8	0.0
				Wind +X ecc.+	-0.1	-0.4	-0.0	-0.4	-0.0	0.0	-0.1	0.5	0.0	-0.4	-0.0	0.0
				Wind +X ecc.-	-0.1	-0.5	0.2	-0.5	0.2	-0.0	-0.1	0.7	-0.2	-0.5	0.2	-0.0
				Wind -X ecc.+	0.1	0.4	0.0	0.4	0.0	-0.0	0.1	-0.5	-0.0	0.4	0.0	-0.0
				Wind -X ecc.-	0.1	0.5	-0.2	0.5	-0.2	0.0	0.1	-0.7	0.2	0.5	-0.2	0.0
				Wind +Y ecc.+	-0.2	-0.4	0.1	-0.4	-0.0	-0.0	-0.2	0.5	0.1	-0.4	-0.0	-0.0
				Wind +Y ecc.-	-0.3	0.1	-0.8	0.1	-0.9	0.0	-0.3	-0.2	1.3	0.1	-0.9	0.0
				Wind -Y ecc.+	0.2	0.4	-0.1	0.4	0.0	0.0	0.2	-0.5	-0.1	0.4	0.0	0.0
				Wind -Y ecc.-	0.3	-0.1	0.8	-0.1	0.9	-0.0	0.3	0.2	-1.3	-0.1	0.9	-0.0
				Earthquake X Mode 1	-0.1	-4.5	4.9	-4.3	4.3	-0.1	-0.1	5.7	-5.5	-4.3	4.3	-0.1
				Earthquake X Mode 2	2.0	3.7	3.1	3.4	2.5	-0.1	2.0	-4.5	-3.0	3.4	2.5	-0.1
				Earthquake X Mode 3	-0.4	0.0	-1.3	0.0	-1.2	0.0	-0.4	-0.0	1.5	0.0	-1.2	0.0
				Earthquake X Mode 4	-0.0	1.7	-2.0	1.2	-1.4	0.0	-0.0	-1.2	1.4	1.2	-1.4	0.0
				Earthquake X Mode 5	-0.5	-1.4	-1.3	-1.0	-0.9	0.0	-0.5	1.0	0.8	-1.0	-0.9	0.0
				Earthquake X Mode 6	0.1	0.0	0.3	0.0	0.2	-0.0	0.1	-0.0	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 7	0.0	-0.8	1.1	-0.4	0.6	-0.0	0.0	0.3	-0.4	-0.4	0.6	-0.0
				Earthquake X Mode 8	-0.1	-0.2	-0.4	-0.1	-0.2	-0.0	-0.1	0.1	0.2	-0.1	-0.2	-0.0
				Earthquake X Mode 9	-0.1	-0.6	-0.4	-0.4	-0.2	0.0	-0.1	0.2	0.1	-0.4	-0.2	0.0
				Earthquake Y Mode 1	-0.0	-2.1	2.2	-1.9	2.0	-0.0	-0.0	2.6	-2.5	-1.9	2.0	-0.0
				Earthquake Y Mode 2	0.6	1.1	1.0	1.1	0.8	-0.0	0.6	-1.4	-0.9	1.1	0.8	-0.0
				Earthquake Y Mode 3	-2.4	0.1	-8.0	0.1	-7.3	0.0	-2.4	-0.3	9.4	0.1	-7.3	0.0
				Earthquake Y Mode 4	-0.0	0.3	-0.4	0.2	-0.3	0.0	-0.0	-0.2	0.3	0.2	-0.3	0.0
				Earthquake Y Mode 5	-0.1	-0.3	-0.2	-0.2	-0.2	0.0	-0.1	0.2	0.2	-0.2	-0.2	0.0
				Earthquake Y Mode 6	0.6	0.2	2.5	0.1	1.8	-0.0	0.6	-0.1	-1.9	0.1	1.8	-0.0
				Earthquake Y Mode 7	0.0	-0.2	0.3	-0.1	0.2	-0.0	0.0	0.1	-0.1	-0.1	0.2	-0.0
				Earthquake Y Mode 8	-0.2	-0.5	-1.1	-0.3	-0.6	-0.0	-0.2	0.2	0.4	-0.3	-0.6	-0.0
				Earthquake Y Mode 9	-0.0	-0.2	-0.1	-0.1	-0.1	0.0	-0.0	0.1	0.0	-0.1	-0.1	0.0
	Floor 4	50x50	9.00/11.40	Self weight	268.2	44.1	48.4	34.7	38.7	0.0	253.5	-39.3	-44.5	34.7	38.7	0.0
				Dead load	45.9	15.8	16.3	13.8	14.4	-0.0	45.9	-17.4	-18.2	13.8	14.4	-0.0
				Live load	79.2	27.4	27.7	23.2	23.6	0.0	79.2	-28.4	-28.9	23.2	23.6	0.0
				Wind +X ecc.+	-0.5	-0.6	-0.0	-0.6	-0.0	0.0	-0.5	1.0	0.0	-0.6	-0.0	0.0
				Wind +X ecc.-	-0.4	-0.7	0.3	-0.8	0.4	-0.0	-0.4	1.3	-0.5	-0.8	0.4	-0.0
				Wind -X ecc.+	0.5	0.6	0.0	0.6	0.0	-0.0	0.5	-1.0	-0.0	0.6	0.0	-0.0
				Wind -X ecc.-	0.4	0.7	-0.3	0.8	-0.4	0.0	0.4	-1.3	0.5	0.8	-0.4	0.0
				Wind +Y ecc.+	-0.6	-0.6	-0.2	-0.6	-0.3	-0.0	-0.6	0.9	0.5	-0.6	-0.3	-0.0
				Wind +Y ecc.-	-1.1	0.2	-1.7	0.3	-2.0	0.0	-1.1	-0.5	3.2	0.3	-2.0	0.0
				Wind -Y ecc.+	0.6	0.6	0.2	0.6	0.3	0.0	0.6	-0.9	-0.5	0.6	0.3	0.0
				Wind -Y ecc.-	1.1	-0.2	1.7	-0.3	2.0	-0.0	1.1	0.5	-3.2	-0.3	2.0	-0.0
				Earthquake X Mode 1	0.3	-6.7	7.8	-7.1	8.0	-0.1	0.3	10.4	-11.4	-7.1	8.0	-0.1
				Earthquake X Mode 2	6.9	5.1	4.0	5.4	3.8	-0.1	6.9	-7.8	-5.2	5.4	3.8	-0.1
				Earthquake X Mode 3	-1.5	0.0	-2.2	0.1	-2.3	0.0	-1.5	-0.1	3.3	0.1	-2.3	0.0
				Earthquake X Mode 4	-0.2	2.1	-2.6	1.2	-1.7	0.0	-0.2	-0.9	1.4	1.2	-1.7	0.0
				Earthquake X Mode 5	-1.5	-1.6	-1.5	-0.9	-0.9	0.0	-1.5	0.6	0.6	-0.9	-0.9	0.0
				Earthquake X Mode 6	0.2	0.0	0.5	-0.0	0.3	-0.0	0.2	0.0	-0.3	-0.0	0.3	-0.0
				Earthquake X Mode 7	0.1	-0.2	0.4	0.1	-0.1	0.0	0.1	-0.4	0.6	0.1	-0.1	0.0
				Earthquake X Mode 8	-0.1	-0.0	-0.2	0.0	0.0	0.0	-0.1	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	-0.2	-0.2	-0.0	0.1	0.1	-0.0	-0.2	-0.3	-0.3	0.1	0.1	-0.0
				Earthquake Y Mode 1	0.1	-3.0	3.5	-3.2	3.6	-0.1	0.1	4.7	-5.2	-3.2	3.6	-0.1
				Earthquake Y Mode 2	2.1	1.6	1.2	1.7	1.2	-0.0	2.1	-2.4	-1.6	1.7	1.2	-0.0
				Earthquake Y Mode 3	-9.2	0.3	-13.5	0.5	-14.1	0.1	-9.2	-0.9	20.5	0.5	-14.1	0.1
				Earthquake Y Mode 4	-0.0	0.4	-0.5	0.2	-0.3	0.0	-0.0	-0.2	0.3	0.2	-0.3	0.0
				Earthquake Y Mode 5	-0.3	-0.3	-0.3	-0.2	-0.2	0.0	-0.3	0.1	0.1	-0.2	-0.2	0.0
				Earthquake Y Mode 6	1.7	0.1	3.7	-0.0	2.5	-0.0	1.7	0.1	-2.2	-0.0	2.5	-0.0
				Earthquake Y Mode 7	0.0	-0.1	0.1	0.0	-0.0	0.0	0.0	-0.1	0.2	0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.3	-0.1	-0.5	0.1	0.0	0.0	-0.3	-0.3	-0.5	0.1	0.0	0.0
				Earthquake Y Mode 9	-0.1	-0.1	-0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1	0.0	0.0	-0.0



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.40	Self weight	404.6	46.7	50.3	39.9	42.7	0.0	389.9	-49.1	-52.3	39.9	42.7	0.0	
				Dead load	87.7	13.5	13.7	11.2	11.4	-0.0	87.7	-13.4	-13.6	11.2	11.4	-0.0
				Live load	136.8	25.0	25.4	20.9	21.2	0.0	136.8	-25.3	-25.6	20.9	21.2	0.0
				Wind +X ecc.+	-1.0	-0.9	-0.0	-0.9	-0.0	0.0	-1.0	1.3	0.0	-0.9	-0.0	0.0
				Wind +X ecc.-	-0.7	-1.2	0.5	-1.2	0.5	-0.0	-0.7	1.7	-0.7	-1.2	0.5	-0.0
				Wind -X ecc.+	1.0	0.9	0.0	0.9	0.0	-0.0	1.0	-1.3	-0.0	0.9	0.0	-0.0
				Wind -X ecc.-	0.7	1.2	-0.5	1.2	-0.5	0.0	0.7	-1.7	0.7	1.2	-0.5	0.0
				Wind +Y ecc.+	-1.3	-0.9	-0.4	-0.9	-0.5	-0.0	-1.3	1.1	0.8	-0.9	-0.5	-0.0
				Wind +Y ecc.-	-2.3	0.4	-2.9	0.5	-2.9	0.0	-2.3	-0.7	4.2	0.5	-2.9	0.0
				Wind -Y ecc.+	1.3	0.9	0.4	0.9	0.5	0.0	1.3	-1.1	-0.8	0.9	0.5	0.0
				Wind -Y ecc.-	2.3	-0.4	2.9	-0.5	2.9	-0.0	2.3	0.7	-4.2	-0.5	2.9	-0.0
				Earthquake X Mode 1	0.8	-10.3	11.4	-9.3	10.3	-0.2	0.8	12.1	-13.4	-9.3	10.3	-0.2
				Earthquake X Mode 2	12.9	7.9	5.3	7.1	4.6	-0.1	12.9	-9.1	-5.7	7.1	4.6	-0.1
				Earthquake X Mode 3	-2.9	0.1	-3.2	0.2	-3.0	0.0	-2.9	-0.3	3.9	0.2	-3.0	0.0
				Earthquake X Mode 4	-0.3	1.3	-1.6	0.3	-0.4	0.0	-0.3	0.5	-0.5	0.3	-0.4	0.0
				Earthquake X Mode 5	-2.0	-1.0	-0.8	-0.2	-0.2	0.0	-2.0	-0.5	-0.4	-0.2	-0.2	0.0
				Earthquake X Mode 6	0.3	-0.0	0.3	-0.0	0.1	-0.0	0.3	0.0	0.1	-0.0	0.1	-0.0
				Earthquake X Mode 7	0.0	0.6	-1.0	0.5	-0.8	0.0	0.0	-0.5	0.9	0.5	-0.8	0.0
				Earthquake X Mode 8	-0.0	0.2	0.4	0.1	0.3	0.0	-0.0	-0.1	-0.4	0.1	0.3	0.0
				Earthquake X Mode 9	-0.0	0.5	0.3	0.4	0.2	-0.0	-0.0	-0.4	-0.2	0.4	0.2	-0.0
				Earthquake Y Mode 1	0.4	-4.7	5.2	-4.2	4.7	-0.1	0.4	5.5	-6.1	-4.2	4.7	-0.1
				Earthquake Y Mode 2	4.0	2.4	1.6	2.2	1.4	-0.0	4.0	-2.8	-1.8	2.2	1.4	-0.0
				Earthquake Y Mode 3	-18.0	0.7	-19.8	0.9	-18.3	0.1	-18.0	-1.6	24.2	0.9	-18.3	0.1
				Earthquake Y Mode 4	-0.1	0.2	-0.3	0.1	-0.1	0.0	-0.1	0.1	-0.1	0.1	-0.1	0.0
				Earthquake Y Mode 5	-0.4	-0.2	-0.1	-0.0	-0.0	0.0	-0.4	-0.1	-0.1	-0.0	-0.0	0.0
				Earthquake Y Mode 6	2.4	-0.1	2.5	-0.1	0.8	-0.0	2.4	0.2	0.5	-0.1	0.8	-0.0
				Earthquake Y Mode 7	0.0	0.2	-0.3	0.1	-0.2	0.0	0.0	-0.2	0.3	0.1	-0.2	0.0
				Earthquake Y Mode 8	-0.1	0.4	1.0	0.3	0.8	0.0	-0.1	-0.3	-0.9	0.3	0.8	0.0
				Earthquake Y Mode 9	-0.0	0.2	0.1	0.1	0.1	-0.0	-0.0	-0.2	-0.1	0.1	0.1	-0.0
Floor 2	50x50	3.00/5.40	Self weight	541.1	51.3	55.9	40.8	44.4	0.0	526.4	-46.7	-50.8	40.8	44.4	0.0	
				Dead load	129.4	15.8	16.2	12.7	13.0	0.0	129.4	-14.7	-15.0	12.7	13.0	0.0
				Live load	194.2	28.6	29.1	22.8	23.2	0.0	194.2	-26.2	-26.7	22.8	23.2	0.0
				Wind +X ecc.+	-1.5	-1.4	-0.0	-1.1	-0.0	0.0	-1.5	1.2	0.0	-1.1	-0.0	0.0
				Wind +X ecc.-	-1.1	-1.8	0.8	-1.4	0.6	-0.0	-1.1	1.6	-0.8	-1.4	0.6	-0.0
				Wind -X ecc.+	1.5	1.4	0.0	1.1	0.0	-0.0	1.5	-1.2	-0.0	1.1	0.0	-0.0
				Wind -X ecc.-	1.1	1.8	-0.8	1.4	-0.6	0.0	1.1	-1.6	0.8	1.4	-0.6	0.0
				Wind +Y ecc.+	-2.1	-1.4	-0.6	-1.0	-0.7	-0.0	-2.1	1.0	1.0	-1.0	-0.7	-0.0
				Wind +Y ecc.-	-3.9	0.6	-4.2	0.6	-3.7	0.0	-3.9	-0.9	4.7	0.6	-3.7	0.0
				Wind -Y ecc.+	2.1	1.4	0.6	1.0	0.7	0.0	2.1	-1.0	-1.0	1.0	0.7	0.0
				Wind -Y ecc.-	3.9	-0.6	4.2	-0.6	3.7	-0.0	3.9	0.9	-4.7	-0.6	3.7	-0.0
				Earthquake X Mode 1	1.4	-13.6	14.6	-10.1	11.3	-0.2	1.4	10.6	-12.5	-10.1	11.3	-0.2
				Earthquake X Mode 2	19.3	10.4	6.5	7.5	4.8	-0.1	19.3	-7.7	-5.0	7.5	4.8	-0.1
				Earthquake X Mode 3	-4.6	0.2	-4.1	0.2	-3.3	0.0	-4.6	-0.4	3.9	0.2	-3.3	0.0
				Earthquake X Mode 4	-0.3	-0.5	0.6	-0.9	1.1	-0.0	-0.3	1.6	-1.9	-0.9	1.1	-0.0
				Earthquake X Mode 5	-1.7	0.5	0.4	0.7	0.6	-0.0	-1.7	-1.3	-1.1	0.7	0.6	-0.0
				Earthquake X Mode 6	0.3	-0.0	-0.1	-0.0	-0.2	0.0	0.3	0.0	0.3	-0.0	-0.2	0.0
				Earthquake X Mode 7	-0.0	0.4	-0.6	0.1	-0.1	0.0	-0.0	0.2	-0.3	0.1	-0.1	0.0
				Earthquake X Mode 8	0.0	0.1	0.3	-0.0	0.1	-0.0	0.0	0.1	0.1	-0.0	0.1	-0.0
				Earthquake X Mode 9	0.1	0.3	0.1	0.0	-0.0	-0.0	0.1	0.2	0.1	0.0	-0.0	-0.0
				Earthquake Y Mode 1	0.6	-6.2	6.6	-4.6	5.1	-0.1	0.6	4.8	-5.7	-4.6	5.1	-0.1
				Earthquake Y Mode 2	6.0	3.2	2.0	2.3	1.5	-0.0	6.0	-2.4	-1.5	2.3	1.5	-0.0
				Earthquake Y Mode 3	-28.0	0.9	-25.4	1.3	-20.5	0.1	-28.0	-2.2	23.8	1.3	-20.5	0.1
				Earthquake Y Mode 4	-0.1	-0.1	0.1	-0.2	0.2	-0.0	-0.1	0.3	-0.4	-0.2	0.2	-0.0
				Earthquake Y Mode 5	-0.3	0.1	0.1	0.1	0.1	-0.0	-0.3	-0.2	-0.2	0.1	0.1	-0.0
				Earthquake Y Mode 6	2.1	-0.2	-0.6	-0.1	-1.4	0.0	2.1	0.1	2.8	-0.1	-1.4	0.0
				Earthquake Y Mode 7	-0.0	0.1	-0.2	0.0	-0.0	0.0	-0.0	0.1	-0.1	0.0	-0.0	0.0
				Earthquake Y Mode 8	0.1	0.2	0.7	-0.0	0.2	-0.0	0.1	0.2	0.3	-0.0	0.2	-0.0
				Earthquake Y Mode 9	0.0	0.1	0.0	0.0	-0.0	-0.0	0.0	0.1	0.0	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.40	Self weight	676.2	26.2	27.8	29.1	31.5	0.0	661.5	-43.6	-47.7	29.1	31.5	0.0	
				Dead load	170.9	8.0	8.0	8.9	9.1	0.0	170.9	-13.3	-13.7	8.9	9.1	0.0
				Live load	251.0	14.4	14.3	16.0	16.2	0.0	251.0	-24.0	-24.7	16.0	16.2	0.0
				Wind +X ecc.+	-2.0	-2.3	-0.1	-1.1	-0.0	0.0	-2.0	0.4	0.0	-1.1	-0.0	0.0
				Wind +X ecc.-	-1.5	-3.1	1.4	-1.6	0.8	-0.0	-1.5	0.6	-0.4	-1.6	0.8	-0.0
				Wind -X ecc.+	2.0	2.3	0.1	1.1	0.0	-0.0	2.0	-0.4	-0.0	1.1	0.0	-0.0
				Wind -X ecc.-	1.5	3.1	-1.4	1.6	-0.8	0.0	1.5	-0.6	0.4	1.6	-0.8	0.0
				Wind +Y ecc.+	-3.0	-1.7	-2.6	-0.8	-1.5	-0.0	-3.0	0.2	1.0	-0.8	-1.5	-0.0
				Wind +Y ecc.-	-5.4	2.1	-9.3	1.2	-5.1	0.0	-5.4	-0.7	3.0	1.2	-5.1	0.0
				Wind -Y ecc.+	3.0	1.7	2.6	0.8	1.5	0.0	3.0	-0.2	-1.0	0.8	1.5	0.0
				Wind -Y ecc.-	5.4	-2.1	9.3	-1.2	5.1	-0.0	5.4	0.7	-3.0	-1.2	5.1	-0.0
				Earthquake X Mode 1	2.1	-19.7	21.6	-9.6	11.3	-0.1	2.1	3.4	-5.4	-9.6	11.3	-0.1
				Earthquake X Mode 2	24.6	14.4	8.1	6.9	4.1	-0.1	24.6	-2.1	-1.6	6.9	4.1	-0.1
				Earthquake X Mode 3	-6.0	0.9	-7.2	0.5	-3.9	0.0	-6.0	-0.4	2.0	0.5	-3.9	0.0
				Earthquake X Mode 4	-0.2	-2.6	3.3	-1.5	1.9	-0.0	-0.2	0.9	-1.4	-1.5	1.9	-0.0
				Earthquake X Mode 5	-1.0	2.0	1.9	1.1	1.1	-0.0	-1.0	-0.7	-0.7	1.1	1.1	-0.0
				Earthquake X Mode 6	0.2	0.0	-0.6	0.0	-0.4	0.0	0.2	-0.0	0.3	0.0	-0.4	0.0
				Earthquake X Mode 7	-0.0	-0.8	1.2	-0.5	0.8	-0.0	-0.0	0.5	-0.8	-0.5	0.8	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0	-0.0	0.1	0.4	-0.1	-0.4	0.0
				Earthquake X Mode 9	-0.0	-0.7	-0.3	-0.4	-0.2	0.0	-0.0	0.4	0.2	-0.4	-0.2	0.0
				Earthquake Y Mode 1	1.0	-8.9	9.8	-4.4	5.1	-0.0	1.0	1.5	-2.5	-4.4	5.1	-0.0
				Earthquake Y Mode 2	7.6	4.4	2.5	2.1	1.3	-0.0	7.6	-0.6	-0.5	2.1	1.3	-0.0
				Earthquake Y Mode 3	-36.9	5.6	-44.6	3.3	-23.8	0.1	-36.9	-2.4	12.6	3.3	-23.8	0.1



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C2	techo	50x50	12.00/14.40	Self weight	254.8	-7.5	111.4	-6.5	81.3	0.0	240.1	8.1	-83.6	-6.5	81.3	0.0
				Dead load	10.7	-1.1	9.6	-0.4	5.1	-0.0	10.7	-0.1	-2.5	-0.4	5.1	-0.0
				Live load	49.1	-2.5	47.0	-1.6	28.5	0.0	49.1	1.4	-21.4	-1.6	28.5	0.0
				Wind +X ecc.+	0.0	-0.8	-0.0	-0.6	-0.0	0.0	0.0	0.7	0.0	-0.6	-0.0	0.0
				Wind +X ecc.-	0.1	-1.1	0.1	-0.8	0.1	-0.0	0.1	0.9	-0.1	-0.8	0.1	-0.0
				Wind -X ecc.+	-0.0	0.8	0.0	0.6	0.0	-0.0	-0.0	-0.7	-0.0	0.6	0.0	-0.0
				Wind -X ecc.-	-0.1	1.1	-0.1	0.8	-0.1	0.0	-0.1	-0.9	0.1	0.8	-0.1	0.0
				Wind +Y ecc.+	-0.2	-0.9	-0.5	-0.7	-0.5	-0.0	-0.2	0.8	0.6	-0.7	-0.5	-0.0
				Wind +Y ecc.-	-0.4	0.1	-1.2	0.1	-1.1	0.0	-0.4	-0.2	1.4	0.1	-1.1	0.0
				Wind -Y ecc.+	0.2	0.9	0.5	0.7	0.5	0.0	0.2	-0.8	-0.6	0.7	0.5	0.0
				Wind -Y ecc.-	0.4	-0.1	1.2	-0.1	1.1	-0.0	0.4	0.2	-1.4	-0.1	1.1	-0.0
				Earthquake X Mode 1	1.2	-9.2	3.3	-7.1	2.7	-0.1	1.2	7.9	-3.2	-7.1	2.7	-0.1
				Earthquake X Mode 2	0.2	7.6	1.6	5.8	1.2	-0.1	0.2	-6.4	-1.2	5.8	1.2	-0.1
				Earthquake X Mode 3	-0.5	-0.0	-1.7	-0.0	-1.4	0.0	-0.5	0.0	1.6	-0.0	-1.4	0.0
				Earthquake X Mode 4	-0.4	2.6	-1.4	1.8	-1.0	0.0	-0.4	-1.7	0.9	1.8	-1.0	0.0
				Earthquake X Mode 5	-0.1	-2.2	-0.8	-1.5	-0.5	0.0	-0.1	1.4	0.5	-1.5	-0.5	0.0
				Earthquake X Mode 6	0.1	0.0	0.4	0.0	0.3	-0.0	0.1	-0.0	-0.3	0.0	0.3	-0.0
				Earthquake X Mode 7	0.1	-1.0	0.8	-0.6	0.5	-0.0	0.1	0.4	-0.3	-0.6	0.5	-0.0
				Earthquake X Mode 8	-0.1	-0.3	-0.5	-0.2	-0.3	-0.0	-0.1	0.1	0.2	-0.2	-0.3	-0.0
				Earthquake X Mode 9	0.0	-0.8	-0.1	-0.5	-0.1	0.0	0.0	0.4	0.0	-0.5	-0.1	0.0
				Earthquake Y Mode 1	0.6	-4.2	1.5	-3.2	1.2	-0.0	0.6	3.6	-1.4	-3.2	1.2	-0.0
				Earthquake Y Mode 2	0.1	2.3	0.5	1.8	0.4	-0.0	0.1	-2.0	-0.4	1.8	0.4	-0.0
				Earthquake Y Mode 3	-3.0	-0.2	-10.2	-0.1	-8.4	0.0	-3.0	0.1	10.0	-0.1	-8.4	0.0
				Earthquake Y Mode 4	-0.1	0.5	-0.3	0.4	-0.2	0.0	-0.1	-0.3	0.2	0.4	-0.2	0.0
				Earthquake Y Mode 5	-0.0	-0.4	-0.1	-0.3	-0.1	0.0	-0.0	0.3	0.1	-0.3	-0.1	0.0
				Earthquake Y Mode 6	0.6	0.3	3.0	0.2	2.1	-0.0	0.6	-0.2	-2.1	0.2	2.1	-0.0
				Earthquake Y Mode 7	0.0	-0.3	0.2	-0.2	0.1	-0.0	0.0	0.1	-0.1	-0.2	0.1	-0.0
				Earthquake Y Mode 8	-0.1	-0.7	-1.2	-0.4	-0.7	-0.0	-0.1	0.3	0.5	-0.4	-0.7	-0.0
				Earthquake Y Mode 9	0.0	-0.3	-0.0	-0.2	-0.0	0.0	0.0	0.1	0.0	-0.2	-0.0	0.0
	Floor 4	50x50	9.00/11.40	Self weight	501.7	-3.2	92.9	-2.1	75.5	0.0	487.0	1.9	-88.3	-2.1	75.5	0.0
				Dead load	68.8	-1.5	14.8	-1.4	12.9	-0.0	68.8	1.8	-16.2	-1.4	12.9	-0.0
				Live load	172.6	-2.9	61.7	-2.5	52.6	0.0	172.6	3.0	-64.6	-2.5	52.6	0.0
				Wind +X ecc.+	0.0	-1.3	-0.0	-1.2	-0.0	0.0	0.0	1.6	0.0	-1.2	-0.0	0.0
				Wind +X ecc.-	0.2	-1.7	0.2	-1.6	0.2	-0.0	0.2	2.2	-0.4	-1.6	0.2	-0.0
				Wind -X ecc.+	-0.0	1.3	0.0	1.2	0.0	-0.0	-0.0	-1.6	-0.0	1.2	0.0	-0.0
				Wind -X ecc.-	-0.2	1.7	-0.2	1.6	-0.2	0.0	-0.2	-2.2	0.4	1.6	-0.2	0.0
				Wind +Y ecc.+	-0.7	-1.3	-1.0	-1.2	-1.1	-0.0	-0.7	1.6	1.6	-1.2	-1.1	-0.0
				Wind +Y ecc.-	-1.6	0.5	-2.2	0.5	-2.3	0.0	-1.6	-0.7	3.4	0.5	-2.3	0.0
				Wind -Y ecc.+	0.7	1.3	1.0	1.2	1.1	0.0	0.7	-1.6	-1.6	1.2	1.1	0.0
				Wind -Y ecc.-	1.6	-0.5	2.2	-0.5	2.3	-0.0	1.6	0.7	-3.4	-0.5	2.3	-0.0
				Earthquake X Mode 1	4.2	-14.0	5.2	-13.1	5.2	-0.1	4.2	17.3	-7.1	-13.1	5.2	-0.1
				Earthquake X Mode 2	0.9	11.0	1.7	10.2	1.5	-0.1	0.9	-13.4	-1.9	10.2	1.5	-0.1
				Earthquake X Mode 3	-1.8	0.1	-2.7	0.1	-2.6	0.0	-1.8	-0.2	3.6	0.1	-2.6	0.0
				Earthquake X Mode 4	-1.0	3.0	-1.7	2.1	-1.2	0.0	-1.0	-2.0	1.1	2.1	-1.2	0.0
				Earthquake X Mode 5	-0.4	-2.3	-0.8	-1.6	-0.5	0.0	-0.4	1.5	0.4	-1.6	-0.5	0.0
				Earthquake X Mode 6	0.2	0.0	0.5	0.0	0.3	-0.0	0.2	0.0	-0.3	0.0	0.3	-0.0
				Earthquake X Mode 7	0.2	-0.2	0.2	0.1	-0.0	0.0	0.2	-0.4	0.3	0.1	-0.0	0.0
				Earthquake X Mode 8	-0.1	-0.0	-0.2	0.0	0.0	0.0	-0.1	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	0.0	-0.1	0.0	0.1	0.0	-0.0	0.0	-0.3	-0.1	0.1	0.0	-0.0
				Earthquake Y Mode 1	1.9	-6.4	2.4	-5.9	2.3	-0.1	1.9	7.9	-3.2	-5.9	2.3	-0.1
				Earthquake Y Mode 2	0.3	3.4	0.5	3.1	0.5	-0.0	0.3	-4.1	-0.6	3.1	0.5	-0.0
				Earthquake Y Mode 3	-11.4	0.5	-16.3	0.6	-16.0	0.1	-11.4	-1.0	22.1	0.6	-16.0	0.1
				Earthquake Y Mode 4	-0.2	0.6	-0.3	0.4	-0.2	0.0	-0.2	-0.4	0.2	0.4	-0.2	0.0
				Earthquake Y Mode 5	-0.1	-0.4	-0.1	-0.3	-0.1	0.0	-0.1	0.3	0.1	-0.3	-0.1	0.0
				Earthquake Y Mode 6	2.1	0.1	4.1	0.0	2.8	-0.0	2.1	0.1	-2.7	0.0	2.8	-0.0
				Earthquake Y Mode 7	0.1	-0.1	0.1	0.0	-0.0	0.0	0.1	-0.1	0.1	0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.3	-0.0	-0.4	0.1	0.0	0.0	-0.3	-0.3	-0.5	0.1	0.0	0.0
				Earthquake Y Mode 9	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	-0.1	-0.0	0.0	0.0	-0.0
Floor 3	50x50	6.00/8.40	Self weight	748.2	-4.5	94.2	-4.0	79.7	0.0	733.5	5.0	-97.0	-4.0	79.7	0.0	
				Dead load	126.4	-1.1	13.0	-0.9	10.8	-0.0	126.4	1.1	-13.0	-0.9	10.8	-0.0
				Live load	296.2	-2.7	56.4	-2.3	47.2	0.0	296.2	2.8	-56.8	-2.3	47.2	0.0
				Wind +X ecc.+	0.0	-1.8	-0.0	-1.6	-0.0	0.0	0.0	2.1	0.0	-1.6	-0.0	0.0
				Wind +X ecc.-	0.4	-2.4	0.4	-2.1	0.3	-0.0	0.4	2.7	-0.5	-2.1	0.3	-0.0
				Wind -X ecc.+	-0.0	1.8	0.0	1.6	0.0	-0.0	-0.0	-2.1	-0.0	1.6	0.0	-0.0
				Wind -X ecc.-	-0.4	2.4	-0.4	2.1	-0.3	0.0	-0.4	-2.7	0.5	2.1	-0.3	0.0
				Wind +Y ecc.+	-1.4	-1.8	-1.5	-1.5	-1.5	-0.0	-1.4	1.9	2.0	-1.5	-1.5	-0.0
				Wind +Y ecc.-	-3.3	0.8	-3.4	0.8	-3.2	0.0	-3.3	-1.1	4.4	0.8	-3.2	0.0
				Wind -Y ecc.+	1.4	1.8	1.5	1.5	1.5	0.0	1.4	-1.9	-2.0	1.5	1.5	0.0
				Wind -Y ecc.-	3.3	-0.8	3.4	-0.8	3.2	-0.0	3.3	1.1	-4.4	-0.8	3.2	-0.0
				Earthquake X Mode 1	8.1	-18.7	7.4	-16.2	6.6	-0.2	8.1	20.2	-8.5	-16.2	6.6	-0.2
				Earthquake X Mode 2	1.7	14.6	2.0	12.6	1.7	-0.1	1.7	-15.6	-2.1	12.6	1.7	-0.1
				Earthquake X Mode 3	-3.6	0.2	-3.6	0.2	-3.3	0.0	-3.6	-0.3	4.2	0.2	-3.3	0.0
				Earthquake X Mode 4	-1.4	1.4	-1.0	0.5	-0.3	0.0	-1.4	0.2	-0.2	0.5	-0.3	0.0
				Earthquake X Mode 5	-0.5	-1.0	-0.4	-0.3	-0.1	0.0	-0.5	-0.2	-0.1	-0.3	-0.1	0.0
				Earthquake X Mode 6	0.4	-0.0	0.3	-0.0	0.1	-0.0	0.4	0.0	0.0	-0.0	0.1	-0.0
				Earthquake X Mode 7	0.1	0.9	-0.7	0.7	-0.6	0.0	0.1	-0.8	0.6	0.7	-0.6	0.0
				Earthquake X Mode 8	-0.0	0.2	0.5	0.2	0.4	0.0	-0.0	-0.2	-0.4	0.2	0.4	0.0
				Earthquake X Mode 9	0.0	0.7	0.1	0.6	0.0	-0.0	0.0	-0.7	-0.0	0.6	0.0	-0.0
				Earthquake Y Mode 1	3.7	-8.5	3.3	-7.4	3.0	-0.1	3.7	9.2	-3.9	-7.4	3.0	-0.1
				Earthquake Y Mode 2	0.5	4.5	0.6	3.9	0.5	-0.0	0.5	-4.8	-0.6	3.9	0.5	-0.0
				Earthquake Y Mode 3	-22.2	1.2	-22.4	1.3	-20.1	0.1	-22.2	-2.0	25.9	1.3	-20.1	0.1
				Earthquake Y Mode 4	-0.3	0.3	-0.2	0.1	-0							



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	50x50	3.00/5.40	Self weight	994.9	-5.3	105.2	-4.1	84.0	0.0	980.2	4.5	-96.5	-4.1	84.0	0.0
				Dead load	184.2	-1.5	15.2	-1.1	12.2	0.0	184.2	1.3	-14.1	-1.1	12.2	0.0
				Live load	419.9	-3.5	64.5	-2.7	51.7	0.0	419.9	3.1	-59.6	-2.7	51.7	0.0
				Wind +X ecc.+	0.0	-2.4	-0.0	-1.9	-0.0	0.0	0.0	2.2	0.0	-1.9	-0.0	0.0
				Wind +X ecc.-	0.7	-3.1	0.5	-2.5	0.4	-0.0	0.7	2.9	-0.5	-2.5	0.4	-0.0
				Wind -X ecc.+	-0.0	2.4	0.0	1.9	0.0	-0.0	-0.0	-2.2	-0.0	1.9	0.0	-0.0
				Wind -X ecc.-	-0.7	3.1	-0.5	2.5	-0.4	0.0	-0.7	-2.9	0.5	2.5	-0.4	0.0
				Wind +Y ecc.+	-2.3	-2.2	-2.1	-1.7	-1.8	-0.0	-2.3	1.9	2.3	-1.7	-1.8	-0.0
				Wind +Y ecc.-	-5.5	1.3	-4.7	1.1	-4.0	0.0	-5.5	-1.5	4.9	1.1	-4.0	0.0
				Wind -Y ecc.+	2.3	2.2	2.1	1.7	1.8	0.0	2.3	-1.9	-2.3	1.7	1.8	0.0
				Wind -Y ecc.-	5.5	-1.3	4.7	-1.1	4.0	-0.0	5.5	1.5	-4.9	-1.1	4.0	-0.0
				Earthquake X Mode 1	12.5	-22.3	9.2	-17.4	7.3	-0.2	12.5	19.4	-8.3	-17.4	7.3	-0.2
				Earthquake X Mode 2	2.4	17.1	2.2	13.2	1.7	-0.1	2.4	-14.6	-1.9	13.2	1.7	-0.1
				Earthquake X Mode 3	-5.6	0.4	-4.5	0.4	-3.6	0.0	-5.6	-0.5	4.2	0.4	-3.6	0.0
				Earthquake X Mode 4	-1.3	-1.2	0.5	-1.4	0.7	-0.0	-1.3	2.1	-1.2	-1.4	0.7	-0.0
				Earthquake X Mode 5	-0.4	1.0	0.3	1.1	0.4	-0.0	-0.4	-1.7	-0.6	1.1	0.4	-0.0
				Earthquake X Mode 6	0.3	-0.0	-0.1	-0.0	-0.2	0.0	0.3	0.0	0.4	-0.0	-0.2	0.0
				Earthquake X Mode 7	-0.1	0.3	-0.4	0.1	-0.1	0.0	-0.1	0.1	-0.2	0.1	-0.1	0.0
				Earthquake X Mode 8	0.1	0.0	0.3	-0.0	0.1	-0.0	0.1	0.1	0.1	-0.0	0.1	-0.0
				Earthquake X Mode 9	0.0	0.3	-0.0	0.1	-0.0	-0.0	0.0	0.1	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	5.7	-10.1	4.2	-7.9	3.3	-0.1	5.7	8.8	-3.8	-7.9	3.3	-0.1
				Earthquake Y Mode 2	0.8	5.3	0.7	4.1	0.5	-0.0	0.8	-4.5	-0.6	4.1	0.5	-0.0
				Earthquake Y Mode 3	-34.3	2.3	-27.6	2.3	-22.2	0.1	-34.3	-3.2	25.6	2.3	-22.2	0.1
				Earthquake Y Mode 4	-0.2	-0.2	0.1	-0.3	0.1	-0.0	-0.2	0.4	-0.2	-0.3	0.1	-0.0
				Earthquake Y Mode 5	-0.1	0.2	0.1	0.2	0.1	-0.0	-0.1	-0.3	-0.1	0.2	0.1	-0.0
				Earthquake Y Mode 6	2.6	-0.2	-1.0	-0.1	-1.6	0.0	2.6	0.1	2.9	-0.1	-1.6	0.0
				Earthquake Y Mode 7	-0.0	0.1	-0.1	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0
				Earthquake Y Mode 8	0.1	0.1	0.7	-0.0	0.2	-0.0	0.1	0.2	0.2	0.0	0.2	-0.0
				Earthquake Y Mode 9	0.0	0.1	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0
	Floor 1	50x50	0.00/2.40	Self weight	1241.1	-3.0	52.5	-3.4	58.8	0.0	1226.4	5.1	-88.6	-3.4	58.8	0.0
				Dead load	242.0	-0.8	7.5	-0.9	8.5	0.0	242.0	1.3	-12.9	-0.9	8.5	0.0
				Live load	543.2	-1.9	32.0	-2.1	35.8	0.0	543.2	3.2	-54.0	-2.1	35.8	0.0
				Wind +X ecc.+	0.1	-2.7	-0.0	-1.6	-0.0	0.0	0.1	1.2	0.0	-1.6	-0.0	0.0
				Wind +X ecc.-	1.0	-3.7	0.9	-2.2	0.5	-0.0	1.0	1.6	-0.3	-2.2	0.5	-0.0
				Wind -X ecc.+	-0.1	2.7	0.0	1.6	0.0	-0.0	-0.1	-1.2	-0.0	1.6	0.0	-0.0
				Wind -X ecc.-	-1.0	3.7	-0.9	2.2	-0.5	0.0	-1.0	-1.6	0.3	2.2	-0.5	0.0
				Wind +Y ecc.+	-3.3	-2.0	-4.0	-1.1	-2.3	-0.0	-3.3	0.7	1.6	-1.1	-2.3	-0.0
				Wind +Y ecc.-	-7.6	2.5	-8.4	1.6	-4.8	0.0	-7.6	-1.3	3.3	1.6	-4.8	0.0
				Wind -Y ecc.+	3.3	2.0	4.0	1.1	2.3	0.0	3.3	-0.7	-1.6	1.1	2.3	0.0
				Wind -Y ecc.-	7.6	-2.5	8.4	-1.6	4.8	-0.0	7.6	1.3	-3.3	-1.6	4.8	-0.0
				Earthquake X Mode 1	16.4	-23.5	12.8	-13.9	7.2	-0.1	16.4	9.8	-4.5	-13.9	7.2	-0.1
				Earthquake X Mode 2	3.0	17.3	2.4	10.1	1.4	-0.1	3.0	-7.0	-0.8	10.1	1.4	-0.1
				Earthquake X Mode 3	-7.3	1.0	-6.5	0.7	-3.7	0.0	-7.3	-0.6	2.3	0.7	-3.7	0.0
				Earthquake X Mode 4	-0.8	-3.1	2.1	-2.0	1.3	-0.0	-0.8	1.7	-1.0	-2.0	1.3	-0.0
				Earthquake X Mode 5	-0.3	2.4	1.0	1.5	0.6	-0.0	-0.3	-1.3	-0.5	1.5	0.6	-0.0
				Earthquake X Mode 6	0.2	0.0	-0.6	0.0	-0.4	0.0	0.2	-0.0	0.3	0.0	-0.4	0.0
				Earthquake X Mode 7	0.0	-0.9	0.8	-0.7	0.6	-0.0	0.0	0.7	-0.6	-0.7	0.6	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0	-0.0	0.1	0.4	-0.1	-0.4	0.0
				Earthquake X Mode 9	0.0	-0.8	-0.1	-0.5	-0.0	0.0	0.0	0.6	0.0	-0.5	-0.0	0.0
				Earthquake Y Mode 1	7.5	-10.7	5.8	-6.3	3.3	-0.0	7.5	4.4	-2.0	-6.3	3.3	-0.0
				Earthquake Y Mode 2	0.9	5.3	0.7	3.1	0.4	-0.0	0.9	-2.2	-0.3	3.1	0.4	-0.0
				Earthquake Y Mode 3	-45.2	6.5	-40.1	4.3	-22.7	0.1	-45.2	-3.9	14.3	4.3	-22.7	0.1
				Earthquake Y Mode 4	-0.2	-0.6	0.4	-0.4	0.2	-0.0	-0.2	0.3	-0.2	-0.4	0.2	-0.0
				Earthquake Y Mode 5	-0.0	0.4	0.2	0.3	0.1	-0.0	-0.0	-0.2	-0.1	0.3	0.1	-0.0
				Earthquake Y Mode 6	1.6	0.2	-5.1	0.2	-3.2	0.0	1.6	-0.3	2.5	0.2	-3.2	0.0
				Earthquake Y Mode 7	0.0	-0.3	0.2	-0.2	0.2	-0.0	0.0	0.2	-0.2	-0.2	0.2	-0.0
				Earthquake Y Mode 8	-0.0	-0.5	-1.4	-0.3	-1.0	0.0	-0.0	0.3	0.9	-0.3	-1.0	0.0
				Earthquake Y Mode 9	0.0	-0.3	-0.0	-0.2	-0.0	0.0	0.0	0.2	0.0	-0.2	-0.0	0.0
C3	techo	50x50	12.00/14.40	Self weight	241.1	2.5	111.5	2.1	81.4	0.0	226.4	-2.4	-83.8	2.1	81.4	0.0
				Dead load	12.6	-0.8	10.5	-0.6	6.3	-0.0	12.6	0.7	-4.5	-0.6	6.3	-0.0
				Live load	47.0	1.0	46.8	0.7	28.6	0.0	47.0	-0.7	-21.8	0.7	28.6	0.0
				Wind +X ecc.+	0.0	-0.8	0.0	-0.6	0.0	0.0	0.0	0.7	-0.0	-0.6	0.0	0.0
				Wind +X ecc.-	0.0	-1.0	0.1	-0.8	0.1	-0.0	0.0	0.9	-0.1	-0.8	0.1	-0.0
				Wind -X ecc.+	-0.0	0.8	-0.0	0.6	-0.0	-0.0	-0.0	-0.7	0.0	0.6	-0.0	-0.0
				Wind -X ecc.-	-0.0	1.0	-0.1	0.8	-0.1	0.0	-0.0	-0.9	0.1	0.8	-0.1	0.0
				Wind +Y ecc.+	-0.4	-0.9	-1.1	-0.7	-1.0	-0.0	-0.4	0.7	1.2	-0.7	-1.0	-0.0
				Wind +Y ecc.-	-0.5	0.2	-1.4	0.2	-1.2	0.0	-0.5	-0.2	1.4	0.2	-1.2	0.0
				Wind -Y ecc.+	0.4	0.9	1.1	0.7	1.0	0.0	0.4	-0.7	-1.2	0.7	1.0	0.0
				Wind -Y ecc.-	0.5	-0.2	1.4	-0.2	1.2	-0.0	0.5	0.2	-1.4	-0.2	1.2	-0.0
				Earthquake X Mode 1	0.2	-9.0	0.5	-7.0	0.4	-0.1	0.2	7.7	-0.5	-7.0	0.4	-0.1
				Earthquake X Mode 2	-0.6	7.4	-1.7	5.6	-1.4	-0.1	-0.6	-6.2	1.7	5.6	-1.4	-0.1
				Earthquake X Mode 3	-0.6	0.0	-1.6	0.0	-1.3	0.0	-0.6	-0.0	1.6	0.0	-1.3	0.0
				Earthquake X Mode 4	-0.1	2.6	-0.4	1.8	-0.3	0.0	-0.1	-1.7	0.3	1.8	-0.3	0.0
				Earthquake X Mode 5	0.0	-2.1	0.1	-1.5	0.1	0.0	0.0	1.4	-0.1	-1.5	0.1	0.0
				Earthquake X Mode 6	0.1	0.0	0.3	0.0	0.2	-0.0	0.1	-0.0	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 7	0.0	-0.9	0.3	-0.6	0.2	-0.0	0.0	0.4	-0.1	-0.6	0.2	-0.0
				Earthquake X Mode 8	-0.0	-0.3	-0.5	-0.2	-0.3	-0.0	-0.0	0.1	0.2	-0.2	-0.3	-0.0
				Earthquake X Mode 9	0.0	-0.8	0.2	-0.5	0.1	0.0	0.0	0.3	-0.1	-0.5	0.1	0.0
				Earthquake Y Mode 1	0.1	-4.1	0.2	-3.2	0.2	-0.0	0.1	3.5	-0.2	-3.2	0.2	-0.0
				Earthquake Y Mode 2	-0.2	2.3	-0.5	1.7	-0.4	-0.0	-0.2	-1.9	0.5	1.7	-0.4	-0.0



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 4	50x50	9.00/11.40	Self weight	483.8	0.7	91.8	0.3	74.6	0.0	469.1	-0.1	-87.2	0.3	74.6	0.0
				Dead load	68.9	0.3	14.0	0.3	12.0	-0.0	68.9	-0.5	-14.9	0.3	12.0	-0.0
				Live load	166.6	0.7	60.6	0.6	51.6	0.0	166.6	-0.6	-63.3	0.6	51.6	0.0
				Wind +X ecc.+	0.0	-1.2	0.0	-1.2	0.0	0.0	0.0	1.6	-0.0	-1.2	0.0	0.0
				Wind +X ecc.-	0.1	-1.6	0.1	-1.6	0.1	-0.0	0.1	2.1	-0.1	-1.6	0.1	-0.0
				Wind -X ecc.+	-0.0	1.2	-0.0	1.2	-0.0	-0.0	-0.0	-1.6	0.0	1.2	-0.0	-0.0
				Wind -X ecc.-	-0.1	1.6	-0.1	1.6	-0.1	0.0	-0.1	-2.1	0.1	1.6	-0.1	0.0
				Wind +Y ecc.+	-1.4	-1.3	-1.7	-1.2	-1.8	-0.0	-1.4	1.6	2.5	-1.2	-1.8	-0.0
				Wind +Y ecc.-	-1.7	0.4	-2.0	0.5	-2.1	0.0	-1.7	-0.7	3.0	0.5	-2.1	0.0
				Wind -Y ecc.+	1.4	1.3	1.7	1.2	1.8	0.0	1.4	-1.6	-2.5	1.2	1.8	0.0
				Wind -Y ecc.-	1.7	-0.4	2.0	-0.5	2.1	-0.0	1.7	0.7	-3.0	-0.5	2.1	-0.0
				Earthquake X Mode 1	0.5	-13.7	0.5	-12.8	0.5	-0.1	0.5	17.0	-0.7	-12.8	0.5	-0.1
				Earthquake X Mode 2	-2.0	10.9	-2.6	10.1	-2.5	-0.1	-2.0	-13.3	3.4	10.1	-2.5	-0.1
				Earthquake X Mode 3	-1.8	0.0	-2.3	0.1	-2.3	0.0	-1.8	-0.1	3.1	0.1	-2.3	0.0
				Earthquake X Mode 4	-0.3	2.9	-0.5	2.0	-0.4	0.0	-0.3	-1.9	0.3	2.0	-0.4	0.0
				Earthquake X Mode 5	0.1	-2.3	0.1	-1.6	0.1	0.0	0.1	1.5	-0.1	-1.6	0.1	0.0
				Earthquake X Mode 6	0.2	0.0	0.5	0.0	0.3	-0.0	0.2	-0.0	-0.3	0.0	0.3	-0.0
				Earthquake X Mode 7	0.1	-0.2	0.1	0.1	-0.0	0.0	0.1	-0.4	0.1	0.1	-0.0	0.0
				Earthquake X Mode 8	-0.1	-0.0	-0.2	0.0	0.0	0.0	-0.1	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	0.1	-0.1	0.1	0.1	-0.0	-0.0	0.1	-0.3	0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	0.2	-6.2	0.2	-5.8	0.2	-0.1	0.2	7.7	-0.3	-5.8	0.2	-0.1
				Earthquake Y Mode 2	-0.6	3.4	-0.8	3.1	-0.8	-0.0	-0.6	-4.1	1.0	3.1	-0.8	-0.0
				Earthquake Y Mode 3	-10.8	0.3	-14.4	0.5	-14.0	0.1	-10.8	-0.9	19.3	0.5	-14.0	0.1
				Earthquake Y Mode 4	-0.0	0.6	-0.1	0.4	-0.1	0.0	-0.0	-0.4	0.1	0.4	-0.1	0.0
				Earthquake Y Mode 5	0.0	-0.4	0.0	-0.3	0.0	0.0	0.0	0.3	-0.0	-0.3	0.0	0.0
				Earthquake Y Mode 6	1.8	0.2	3.7	0.1	2.5	-0.0	1.8	-0.0	-2.3	0.1	2.5	-0.0
				Earthquake Y Mode 7	0.0	-0.1	0.0	0.0	-0.0	0.0	0.0	-0.1	0.0	0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.2	-0.0	-0.4	0.1	0.1	0.0	-0.2	-0.3	-0.6	0.1	0.1	0.0
				Earthquake Y Mode 9	0.0	-0.1	0.0	0.0	-0.0	-0.0	0.0	-0.1	0.0	0.0	-0.0	-0.0
	Floor 3	50x50	6.00/8.40	Self weight	724.9	0.9	93.1	0.8	78.7	0.0	710.1	-1.0	-95.8	0.8	78.7	0.0
				Dead load	125.3	0.0	12.8	0.0	10.8	-0.0	125.3	0.0	-13.0	0.0	10.8	-0.0
				Live load	286.4	0.6	55.6	0.5	46.5	0.0	286.4	-0.6	-55.9	0.5	46.5	0.0
				Wind +X ecc.+	0.0	-1.8	0.0	-1.6	0.0	0.0	0.0	2.0	-0.0	-1.6	0.0	0.0
				Wind +X ecc.-	0.2	-2.3	0.1	-2.1	0.1	-0.0	0.2	2.7	-0.2	-2.1	0.1	-0.0
				Wind -X ecc.+	-0.0	1.8	-0.0	1.6	-0.0	-0.0	-0.0	-2.0	0.0	1.6	-0.0	-0.0
				Wind -X ecc.-	-0.2	2.3	-0.1	2.1	-0.1	0.0	-0.2	-2.7	0.2	2.1	-0.1	0.0
				Wind +Y ecc.+	-2.5	-1.7	-2.4	-1.5	-2.3	-0.0	-2.5	1.9	3.1	-1.5	-2.3	-0.0
				Wind +Y ecc.-	-3.1	0.8	-2.9	0.8	-2.8	0.0	-3.1	-1.1	3.8	0.8	-2.8	0.0
				Wind -Y ecc.+	2.5	1.7	2.4	1.5	2.3	0.0	2.5	-1.9	-3.1	1.5	2.3	0.0
				Wind -Y ecc.-	3.1	-0.8	2.9	-0.8	2.8	-0.0	3.1	1.1	-3.8	-0.8	2.8	-0.0
				Earthquake X Mode 1	0.9	-18.2	0.7	-15.8	0.8	-0.2	0.9	19.8	-1.1	-15.8	0.8	-0.2
				Earthquake X Mode 2	-3.6	14.4	-3.4	12.4	-2.9	-0.1	-3.6	-15.4	3.7	12.4	-2.9	-0.1
				Earthquake X Mode 3	-3.2	0.1	-3.1	0.2	-2.8	0.0	-3.2	-0.3	3.6	0.2	-2.8	0.0
				Earthquake X Mode 4	-0.4	1.4	-0.3	0.5	-0.1	0.0	-0.4	0.2	0.0	0.5	-0.1	0.0
				Earthquake X Mode 5	0.1	-1.0	0.1	-0.3	0.0	0.0	0.1	-0.2	0.0	-0.3	0.0	0.0
				Earthquake X Mode 6	0.3	-0.0	0.3	-0.0	0.1	-0.0	0.3	0.0	0.0	-0.0	0.1	-0.0
				Earthquake X Mode 7	0.0	0.8	-0.3	0.7	-0.2	0.0	0.0	-0.8	0.3	0.7	-0.2	0.0
				Earthquake X Mode 8	-0.0	0.2	0.4	0.2	0.3	0.0	-0.0	-0.2	-0.4	0.2	0.3	0.0
				Earthquake X Mode 9	0.0	0.7	-0.2	0.6	-0.2	-0.0	0.0	-0.6	0.2	0.6	-0.2	-0.0
				Earthquake Y Mode 1	0.4	-8.3	0.3	-7.2	0.3	-0.1	0.4	9.0	-0.5	-7.2	0.3	-0.1
				Earthquake Y Mode 2	-1.1	4.4	-1.0	3.8	-0.9	-0.0	-1.1	-4.8	1.1	3.8	-0.9	-0.0
				Earthquake Y Mode 3	-19.6	0.9	-19.1	1.1	-17.1	0.1	-19.6	-1.7	22.0	1.1	-17.1	0.1
				Earthquake Y Mode 4	-0.1	0.3	-0.1	0.1	-0.0	0.0	-0.1	0.0	0.0	0.1	-0.0	0.0
				Earthquake Y Mode 5	0.0	-0.2	0.0	-0.1	0.0	0.0	0.0	-0.0	0.0	-0.1	0.0	0.0
				Earthquake Y Mode 6	2.5	-0.1	2.2	-0.1	0.8	-0.0	2.5	0.2	0.3	-0.1	0.8	-0.0
				Earthquake Y Mode 7	0.0	0.3	-0.1	0.2	-0.1	0.0	0.0	-0.2	0.1	0.2	-0.1	0.0
				Earthquake Y Mode 8	-0.0	0.6	1.1	0.4	0.9	0.0	-0.0	-0.5	-1.0	0.4	0.9	0.0
				Earthquake Y Mode 9	0.0	0.3	-0.1	0.2	-0.1	-0.0	0.0	-0.2	0.1	0.2	-0.1	-0.0
	Floor 2	50x50	3.00/5.40	Self weight	965.9	0.8	103.2	0.6	82.6	0.0	951.2	-0.7	-95.0	0.6	82.6	0.0
				Dead load	181.8	0.1	14.7	0.1	11.8	0.0	181.8	-0.1	-13.7	0.1	11.8	0.0
				Live load	406.1	0.6	63.1	0.5	50.6	0.0	406.1	-0.5	-58.4	0.5	50.6	0.0
				Wind +X ecc.+	0.1	-2.3	0.0	-1.9	0.0	0.0	0.1	2.1	-0.0	-1.9	0.0	0.0
				Wind +X ecc.-	0.2	-3.0	0.2	-2.4	0.1	-0.0	0.2	2.8	-0.2	-2.4	0.1	-0.0
				Wind -X ecc.+	-0.1	2.3	-0.0	1.9	-0.0	-0.0	-0.1	-2.1	0.0	1.9	-0.0	-0.0
				Wind -X ecc.-	-0.2	3.0	-0.2	2.4	-0.1	0.0	-0.2	-2.8	0.2	2.4	-0.1	0.0
				Wind +Y ecc.+	-3.9	-2.2	-3.2	-1.7	-2.7	-0.0	-3.9	1.8	3.2	-1.7	-2.7	-0.0
				Wind +Y ecc.-	-4.7	1.2	-3.8	1.0	-3.3	0.0	-4.7	-1.4	4.0	1.0	-3.3	0.0
				Wind -Y ecc.+	3.9	2.2	3.2	1.7	2.7	0.0	3.9	-1.8	-3.2	1.7	2.7	0.0
				Wind -Y ecc.-	4.7	-1.2	3.8	-1.0	3.3	-0.0	4.7	1.4	-4.0	-1.0	3.3	-0.0
				Earthquake X Mode 1	1.4	-21.7	0.9	-16.9	0.9	-0.2	1.4	18.9	-1.3	-16.9	0.9	-0.2
				Earthquake X Mode 2	-5.2	16.8	-3.9	13.0	-3.0	-0.1	-5.2	-14.4	3.3	13.0	-3.0	-0.1
				Earthquake X Mode 3	-4.7	0.3	-3.7	0.3	-2.9	0.0	-4.7	-0.4	3.4	0.3	-2.9	0.0
				Earthquake X Mode 4	-0.4	-1.1	0.0	-1.3	0.2	-0.0	-0.4	2.0	-0.3	-1.3	0.2	-0.0
				Earthquake X Mode 5	0.1	1.0	-0.1	1.1	-0.1	-0.0	0.1	-1.7	0.1	1.1	-0.1	-0.0
				Earthquake X Mode 6	0.3	-0.0	-0.1	-0.0	-0.2	0.0	0.3	0.0	0.3	-0.0	-0.2	0.0
				Earthquake X Mode 7	-0.0	0.4	-0.2	0.1	-0.0	0.0	-0.0	0.2	-0.1	0.1	-0.0	0.0
				Earthquake X Mode 8	0.0	0.0	0.3	-0.0	0.1	-0.0	0.0	0.1	0.1	-0.0	0.1	-0.0
				Earthquake X Mode 9	-0.0	0.3	-0.1	0.1	-0.0	-0.0	-0.0	0.1	-0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	0.6	-9.9	0.4	-7.7	0.4	-0.1	0.6	8.6	-0.6	-7.7	0.4	-0.1
				Earthquake Y Mode 2	-1.6	5.2	-1.2	4.0	-0.9	-0.0	-1.6	-4.4	1.0	4.0	-0.9	-0.0
				Earthquake Y Mode 3	-28.9	1.7	-22.6	1.9	-18.0	0.1	-28.9	-2.7	20.6	1.9	-18.0	0.1
				Earthquake Y Mode 4	-0.1											



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	50x50	0.00/2.40	Self weight	1204.7	0.5	51.3	0.5	57.4	0.0	1190.0	-0.7	-86.4	0.5	57.4	0.0
				Dead load	237.9	0.1	7.3	0.1	8.2	0.0	237.9	-0.1	-12.4	0.1	8.2	0.0
				Live load	524.4	0.3	31.2	0.3	34.9	0.0	524.4	-0.5	-52.5	0.3	34.9	0.0
				Wind +X ecc.+	0.1	-2.7	-0.0	-1.6	0.0	0.0	0.1	1.2	-0.0	-1.6	0.0	0.0
				Wind +X ecc.-	0.3	-3.7	0.3	-2.2	0.2	-0.0	0.3	1.6	-0.2	-2.2	0.2	-0.0
				Wind -X ecc.+	-0.1	2.7	0.0	1.6	-0.0	-0.0	-0.1	-1.2	0.0	1.6	-0.0	-0.0
				Wind -X ecc.-	-0.3	3.7	-0.3	2.2	-0.2	0.0	-0.3	-1.6	0.2	2.2	-0.2	0.0
				Wind +Y ecc.+	-5.0	-2.0	-5.1	-1.2	-2.9	-0.0	-5.0	0.7	1.7	-1.2	-2.9	-0.0
				Wind +Y ecc.-	-6.2	2.4	-6.7	1.5	-3.8	0.0	-6.2	-1.2	2.4	1.5	-3.8	0.0
				Wind -Y ecc.+	5.0	2.0	5.1	1.2	2.9	0.0	5.0	-0.7	-1.7	1.2	2.9	0.0
				Wind -Y ecc.-	6.2	-2.4	6.7	-1.5	3.8	-0.0	6.2	1.2	-2.4	-1.5	3.8	-0.0
				Earthquake X Mode 1	1.9	-23.2	2.6	-13.6	1.6	-0.1	1.9	9.3	-1.2	-13.6	1.6	-0.1
				Earthquake X Mode 2	-6.5	17.2	-4.2	10.0	-2.3	-0.1	-6.5	-6.8	1.3	10.0	-2.3	-0.1
				Earthquake X Mode 3	-5.9	1.0	-5.2	0.6	-2.9	0.0	-5.9	-0.5	1.7	0.6	-2.9	0.0
				Earthquake X Mode 4	-0.3	-3.1	0.7	-2.0	0.4	-0.0	-0.3	1.6	-0.3	-2.0	0.4	-0.0
				Earthquake X Mode 5	0.1	2.3	-0.1	1.5	-0.0	-0.0	0.1	-1.2	0.0	1.5	-0.0	-0.0
				Earthquake X Mode 6	0.2	0.0	-0.5	0.0	-0.3	0.0	0.2	-0.0	0.2	0.0	-0.3	0.0
				Earthquake X Mode 7	0.0	-0.9	0.4	-0.6	0.3	-0.0	0.0	0.6	-0.2	-0.6	0.3	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0	-0.0	0.1	0.3	-0.1	-0.4	0.0
				Earthquake X Mode 9	0.0	-0.8	0.2	-0.5	0.2	0.0	0.0	0.5	-0.2	-0.5	0.2	0.0
				Earthquake Y Mode 1	0.9	-10.6	1.2	-6.2	0.7	-0.0	0.9	4.2	-0.5	-6.2	0.7	-0.0
				Earthquake Y Mode 2	-2.0	5.3	-1.3	3.1	-0.7	-0.0	-2.0	-2.1	0.4	3.1	-0.7	-0.0
				Earthquake Y Mode 3	-36.4	6.1	-32.2	3.9	-17.7	0.1	-36.4	-3.3	10.2	3.9	-17.7	0.1
				Earthquake Y Mode 4	-0.1	-0.6	0.1	-0.4	0.1	-0.0	-0.1	0.3	-0.1	-0.4	0.1	-0.0
				Earthquake Y Mode 5	0.0	0.4	-0.0	0.3	-0.0	-0.0	0.0	-0.2	0.0	0.3	-0.0	-0.0
				Earthquake Y Mode 6	1.6	0.2	-4.5	0.1	-2.7	0.0	1.6	-0.2	2.0	0.1	-2.7	0.0
				Earthquake Y Mode 7	0.0	-0.3	0.1	-0.2	0.1	-0.0	0.0	0.2	-0.1	-0.2	0.1	-0.0
				Earthquake Y Mode 8	-0.0	-0.5	-1.3	-0.4	-0.9	0.0	-0.0	0.3	0.9	-0.4	-0.9	0.0
				Earthquake Y Mode 9	0.0	-0.3	0.1	-0.2	0.1	0.0	0.0	0.2	-0.1	-0.2	0.1	0.0
C4	techo	50x50	12.00/14.40	Self weight	245.0	-0.0	112.8	-0.3	82.6	0.0	230.3	0.8	-85.4	-0.3	82.6	0.0
				Dead load	11.5	-0.5	9.8	-0.3	5.6	-0.0	11.5	0.1	-3.6	-0.3	5.6	-0.0
				Live load	47.6	0.2	47.2	0.0	28.8	0.0	47.6	0.1	-22.0	0.0	28.8	0.0
				Wind +X ecc.+	-0.0	-0.8	-0.0	-0.6	-0.0	0.0	-0.0	0.7	0.0	-0.6	-0.0	0.0
				Wind +X ecc.-	-0.0	-1.0	-0.1	-0.8	-0.1	-0.0	-0.0	0.9	0.1	-0.8	-0.1	-0.0
				Wind -X ecc.+	0.0	0.8	0.0	0.6	0.0	-0.0	0.0	-0.7	-0.0	0.6	0.0	-0.0
				Wind -X ecc.-	0.0	1.0	0.1	0.8	0.1	0.0	0.0	-0.9	-0.1	0.8	0.1	0.0
				Wind +Y ecc.+	-0.3	-0.9	-1.4	-0.7	-1.2	-0.0	-0.3	0.7	1.4	-0.7	-1.2	-0.0
				Wind +Y ecc.-	-0.2	0.2	-1.0	0.2	-0.8	0.0	-0.2	-0.2	1.0	0.2	-0.8	0.0
				Wind -Y ecc.+	0.3	0.9	1.4	0.7	1.2	0.0	0.3	-0.7	-1.4	0.7	1.2	0.0
				Wind -Y ecc.-	0.2	-0.2	1.0	-0.2	0.8	-0.0	0.2	0.2	-1.0	-0.2	0.8	-0.0
				Earthquake X Mode 1	-0.6	-8.8	-3.1	-6.8	-2.5	-0.1	-0.6	7.6	2.9	-6.8	-2.5	-0.1
				Earthquake X Mode 2	-0.7	7.5	-3.5	5.8	-2.8	-0.1	-0.7	-6.3	3.4	5.8	-2.8	-0.1
				Earthquake X Mode 3	-0.3	-0.0	-1.1	0.0	-0.9	0.0	-0.3	-0.0	1.1	0.0	-0.9	0.0
				Earthquake X Mode 4	0.1	2.5	0.6	1.8	0.4	0.0	0.1	-1.7	-0.4	1.8	0.4	0.0
				Earthquake X Mode 5	0.1	-2.2	0.8	-1.5	0.5	0.0	0.1	1.4	-0.5	-1.5	0.5	0.0
				Earthquake X Mode 6	0.1	0.0	0.3	0.0	0.2	-0.0	0.1	-0.0	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 7	-0.0	-0.9	-0.1	-0.6	-0.0	-0.0	-0.0	0.4	0.0	-0.6	-0.0	-0.0
				Earthquake X Mode 8	-0.1	-0.3	-0.5	-0.2	-0.3	-0.0	-0.1	0.1	0.2	-0.2	-0.3	-0.0
				Earthquake X Mode 9	0.1	-0.8	0.6	-0.5	0.3	0.0	0.1	0.3	-0.2	-0.5	0.3	0.0
				Earthquake Y Mode 1	-0.3	-4.0	-1.4	-3.1	-1.1	-0.0	-0.3	3.5	1.3	-3.1	-1.1	-0.0
				Earthquake Y Mode 2	-0.2	2.3	-1.1	1.8	-0.9	-0.0	-0.2	-2.0	1.0	1.8	-0.9	-0.0
				Earthquake Y Mode 3	-1.6	-0.0	-7.1	0.1	-5.8	0.0	-1.6	-0.2	7.0	0.1	-5.8	0.0
				Earthquake Y Mode 4	0.0	0.5	0.1	0.3	0.1	0.0	0.0	-0.3	-0.1	0.3	0.1	0.0
				Earthquake Y Mode 5	0.0	-0.4	0.1	-0.3	0.1	0.0	0.0	0.3	-0.1	-0.3	0.1	0.0
				Earthquake Y Mode 6	0.5	0.3	2.7	0.2	1.9	-0.0	0.5	-0.1	-1.9	0.2	1.9	-0.0
				Earthquake Y Mode 7	-0.0	-0.3	-0.0	-0.2	-0.0	-0.0	-0.0	0.1	0.0	-0.2	-0.0	-0.0
				Earthquake Y Mode 8	-0.2	-0.6	-1.3	-0.4	-0.8	-0.0	-0.2	0.3	0.5	-0.4	-0.8	-0.0
				Earthquake Y Mode 9	0.0	-0.3	0.2	-0.2	0.1	0.0	0.0	0.1	-0.1	-0.2	0.1	0.0
	Floor 4	50x50	9.00/11.40	Self weight	488.2	0.5	91.7	0.4	74.2	0.0	473.5	-0.6	-86.5	0.4	74.2	0.0
				Dead load	68.1	-0.1	14.3	-0.0	12.4	-0.0	68.1	0.0	-15.5	-0.0	12.4	-0.0
				Live load	168.0	0.4	60.9	0.3	51.9	0.0	168.0	-0.3	-63.6	0.3	51.9	0.0
				Wind +X ecc.+	-0.0	-1.2	-0.0	-1.2	-0.0	0.0	-0.0	1.6	0.0	-1.2	-0.0	0.0
				Wind +X ecc.-	-0.1	-1.6	-0.2	-1.6	-0.2	-0.0	-0.1	2.1	0.2	-1.6	-0.2	-0.0
				Wind -X ecc.+	0.0	1.2	0.0	1.2	0.0	-0.0	0.0	-1.6	-0.0	1.2	0.0	-0.0
				Wind -X ecc.-	0.1	1.6	0.2	1.6	0.2	0.0	0.1	-2.1	-0.2	1.6	0.2	0.0
				Wind +Y ecc.+	-1.5	-1.3	-2.3	-1.2	-2.4	-0.0	-1.5	1.6	3.3	-1.2	-2.4	-0.0
				Wind +Y ecc.-	-1.1	0.4	-1.7	0.5	-1.7	0.0	-1.1	-0.7	2.5	0.5	-1.7	0.0
				Wind -Y ecc.+	1.5	1.3	2.3	1.2	2.4	0.0	1.5	-1.6	-3.3	1.2	2.4	0.0
				Wind -Y ecc.-	1.1	-0.4	1.7	-0.5	1.7	-0.0	1.1	0.7	-2.5	-0.5	1.7	-0.0
				Earthquake X Mode 1	-2.8	-13.6	-4.8	-12.7	-4.6	-0.1	-2.8	16.9	6.2	-12.7	-4.6	-0.1
				Earthquake X Mode 2	-3.3	11.0	-5.7	10.2	-5.4	-0.1	-3.3	-13.4	7.3	10.2	-5.4	-0.1
				Earthquake X Mode 3	-1.2	0.1	-1.9	0.1	-1.9	0.0	-1.2	-0.1	2.6	0.1	-1.9	0.0
				Earthquake X Mode 4	0.3	2.9	0.7	2.0	0.5	0.0	0.3	-1.9	-0.4	2.0	0.5	0.0
				Earthquake X Mode 5	0.4	-2.3	1.0	-1.6	0.6	0.0	0.4	1.5	-0.5	-1.6	0.6	0.0
				Earthquake X Mode 6	0.2	0.0	0.4	0.0	0.3	-0.0	0.2	0.0	-0.3	0.0	0.3	-0.0
				Earthquake X Mode 7	-0.0	-0.2	0.0	0.1	0.0	0.0	-0.0	-0.4	-0.0	0.1	0.0	0.0
				Earthquake X Mode 8	-0.1	-0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	0.1	-0.1	0.1	0.1	-0.1	-0.0	0.1	-0.3	0.3	0.1	-0.1	-0.0
				Earthquake Y Mode 1	-1.3	-6.2	-2.2	-5.8	-2.1	-0.1	-1.3	7.7	2.8	-5.8	-2.1	-0.1
				Earthquake Y Mode 2	-1.0	3.4	-1.7	3.1	-1.7	-0.0	-1.0	-4.1	2.3	3.1	-1.7	-0.0
				Earthquake Y Mode 3	-7.											



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.40	Self weight	730.1	0.2	93.5	0.1	79.1	0.0	715.4	-0.1	-96.3	0.1	79.1	0.0	0.0
				Dead load	124.7	-0.1	12.8	-0.1	10.7	-0.0	124.7	0.1	-12.9	-0.1	10.7	-0.0
				Live load	288.5	0.3	55.8	0.2	46.6	0.0	288.5	-0.2	-56.2	0.2	46.6	0.0
				Wind +X ecc.+	-0.0	-1.8	-0.0	-1.6	-0.0	0.0	-0.0	2.1	0.0	-1.6	-0.0	0.0
				Wind +X ecc.-	-0.2	-2.3	-0.2	-2.1	-0.2	-0.0	-0.2	2.7	0.2	-2.1	-0.2	-0.0
				Wind -X ecc.+	0.0	1.8	0.0	1.6	0.0	-0.0	0.0	-2.1	-0.0	1.6	0.0	-0.0
				Wind -X ecc.-	0.2	2.3	0.2	2.1	0.2	0.0	0.2	-2.7	-0.2	2.1	0.2	0.0
				Wind +Y ecc.+	-3.0	-1.7	-3.4	-1.5	-3.1	-0.0	-3.0	1.9	4.1	-1.5	-3.1	-0.0
				Wind +Y ecc.-	-2.2	0.8	-2.5	0.8	-2.3	0.0	-2.2	-1.1	3.1	0.8	-2.3	0.0
				Wind -Y ecc.+	3.0	1.7	3.4	1.5	3.1	0.0	3.0	-1.9	-4.1	1.5	3.1	0.0
				Wind -Y ecc.-	2.2	-0.8	2.5	-0.8	2.3	-0.0	2.2	1.1	-3.1	-0.8	2.3	-0.0
				Earthquake X Mode 1	-5.6	-18.1	-6.4	-15.7	-5.5	-0.2	-5.6	19.7	6.8	-15.7	-5.5	-0.2
				Earthquake X Mode 2	-6.5	14.5	-7.5	12.5	-6.5	-0.1	-6.5	-15.5	8.1	12.5	-6.5	-0.1
				Earthquake X Mode 3	-2.4	0.2	-2.6	0.2	-2.3	0.0	-2.4	-0.3	2.9	0.2	-2.3	0.0
				Earthquake X Mode 4	0.4	1.4	0.3	0.5	0.1	0.0	0.4	0.2	0.1	0.5	0.1	0.0
				Earthquake X Mode 5	0.6	-1.0	0.5	-0.3	0.1	0.0	0.6	-0.2	0.2	-0.3	0.1	0.0
				Earthquake X Mode 6	0.3	-0.0	0.2	-0.0	0.1	-0.0	0.3	0.0	0.1	-0.0	0.1	-0.0
				Earthquake X Mode 7	0.0	0.9	0.1	0.7	0.0	0.0	0.0	-0.8	-0.0	0.7	0.0	0.0
				Earthquake X Mode 8	-0.0	0.2	0.5	0.2	0.4	0.0	-0.0	-0.2	-0.4	0.2	0.4	0.0
				Earthquake X Mode 9	0.0	0.7	-0.5	0.6	-0.4	-0.0	0.0	-0.6	0.4	0.6	-0.4	-0.0
				Earthquake Y Mode 1	-2.5	-8.2	-2.9	-7.1	-2.5	-0.1	-2.5	8.9	3.1	-7.1	-2.5	-0.1
				Earthquake Y Mode 2	-2.0	4.5	-2.3	3.9	-2.0	-0.0	-2.0	-4.8	2.5	3.9	-2.0	-0.0
				Earthquake Y Mode 3	-14.5	1.0	-16.1	1.2	-14.2	0.1	-14.5	-1.8	18.0	1.2	-14.2	0.1
				Earthquake Y Mode 4	0.1	0.3	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
				Earthquake Y Mode 5	0.1	-0.2	0.1	-0.1	0.0	0.0	0.1	-0.0	0.0	-0.1	0.0	0.0
				Earthquake Y Mode 6	2.3	-0.1	1.9	-0.1	0.6	-0.0	2.3	0.2	0.4	-0.1	0.6	-0.0
				Earthquake Y Mode 7	0.0	0.3	0.0	0.2	0.0	0.0	0.0	-0.2	-0.0	0.2	0.0	0.0
				Earthquake Y Mode 8	-0.0	0.6	1.2	0.4	0.9	0.0	-0.0	-0.4	-1.1	0.4	0.9	0.0
				Earthquake Y Mode 9	0.0	0.3	-0.2	0.2	-0.1	-0.0	0.0	-0.2	0.2	0.2	-0.1	-0.0
Floor 2	50x50	3.00/5.40	Self weight	972.2	0.4	104.0	0.3	83.1	0.0	957.5	-0.3	-95.4	0.3	83.1	0.0	0.0
				Dead load	181.3	-0.0	14.8	-0.0	11.9	0.0	181.3	0.0	-13.8	-0.0	11.9	0.0
				Live load	408.9	0.3	63.7	0.2	51.0	0.0	408.9	-0.3	-58.7	0.2	51.0	0.0
				Wind +X ecc.+	-0.0	-2.3	-0.0	-1.9	-0.0	0.0	-0.0	2.1	0.0	-1.9	-0.0	0.0
				Wind +X ecc.-	-0.3	-3.0	-0.3	-2.4	-0.2	-0.0	-0.3	2.8	0.2	-2.4	-0.2	-0.0
				Wind -X ecc.+	0.0	2.3	0.0	1.9	0.0	-0.0	0.0	-2.1	-0.0	1.9	0.0	-0.0
				Wind -X ecc.-	0.3	3.0	0.3	2.4	0.2	0.0	0.3	-2.8	-0.2	2.4	0.2	0.0
				Wind +Y ecc.+	-4.9	-2.1	-4.6	-1.6	-3.7	-0.0	-4.9	1.8	4.3	-1.6	-3.7	-0.0
				Wind +Y ecc.-	-3.7	1.2	-3.4	1.1	-2.8	0.0	-3.7	-1.4	3.3	1.1	-2.8	0.0
				Wind -Y ecc.+	4.9	2.1	4.6	1.6	3.7	0.0	4.9	-1.8	-4.3	1.6	3.7	0.0
				Wind -Y ecc.-	3.7	-1.2	3.4	-1.1	2.8	-0.0	3.7	1.4	-3.3	-1.1	2.8	-0.0
				Earthquake X Mode 1	-8.5	-21.6	-7.6	-16.8	-5.7	-0.2	-8.5	18.8	6.0	-16.8	-5.7	-0.2
				Earthquake X Mode 2	-10.0	17.0	-9.2	13.1	-6.9	-0.1	-10.0	-14.5	7.4	13.1	-6.9	-0.1
				Earthquake X Mode 3	-3.7	0.3	-3.2	0.3	-2.5	0.0	-3.7	-0.5	2.8	0.3	-2.5	0.0
				Earthquake X Mode 4	0.4	-1.1	-0.3	-1.3	-0.3	-0.0	0.4	2.0	0.5	-1.3	-0.3	-0.0
				Earthquake X Mode 5	0.5	1.0	-0.4	1.1	-0.5	-0.0	0.5	-1.7	0.7	1.1	-0.5	-0.0
				Earthquake X Mode 6	0.2	-0.0	-0.1	-0.0	-0.2	0.0	0.2	0.0	0.3	-0.0	-0.2	0.0
				Earthquake X Mode 7	0.0	0.4	0.0	0.1	-0.0	0.0	0.0	0.2	0.0	0.1	-0.0	0.0
				Earthquake X Mode 8	0.1	0.0	0.2	-0.0	0.0	-0.0	0.1	0.1	0.1	-0.0	0.0	-0.0
				Earthquake X Mode 9	-0.1	0.3	-0.2	0.1	-0.0	-0.0	-0.1	0.1	-0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-3.9	-9.8	-3.5	-7.6	-2.6	-0.1	-3.9	8.5	2.7	-7.6	-2.6	-0.1
				Earthquake Y Mode 2	-3.1	5.2	-2.8	4.1	-2.1	-0.0	-3.1	-4.5	2.3	4.1	-2.1	-0.0
				Earthquake Y Mode 3	-22.6	1.9	-19.7	2.0	-15.3	0.1	-22.6	-2.9	17.2	2.0	-15.3	0.1
				Earthquake Y Mode 4	0.1	-0.2	-0.1	-0.3	-0.1	-0.0	0.1	0.4	0.1	-0.3	-0.1	-0.0
				Earthquake Y Mode 5	0.1	0.2	-0.1	0.2	-0.1	-0.0	0.1	-0.3	0.1	0.2	-0.1	-0.0
				Earthquake Y Mode 6	2.0	-0.3	-1.1	-0.2	-1.6	0.0	2.0	0.1	2.6	-0.2	-1.6	0.0
				Earthquake Y Mode 7	0.0	0.1	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				Earthquake Y Mode 8	0.1	0.1	0.6	-0.0	0.1	-0.0	0.1	0.2	0.3	-0.0	0.1	-0.0
				Earthquake Y Mode 9	-0.0	0.1	-0.1	0.0	-0.0	-0.0	-0.0	0.1	-0.1	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.40	Self weight	1212.7	0.2	52.1	0.2	58.1	0.0	1198.0	-0.3	-87.4	0.2	58.1	0.0	0.0
				Dead load	237.7	-0.0	7.3	-0.0	8.3	0.0	237.7	-0.0	-12.5	-0.0	8.3	0.0
				Live load	528.4	0.2	31.7	0.2	35.3	0.0	528.4	-0.2	-53.1	0.2	35.3	0.0
				Wind +X ecc.+	-0.1	-2.7	-0.0	-1.6	-0.0	0.0	-0.1	1.2	0.0	-1.6	-0.0	0.0
				Wind +X ecc.-	-0.4	-3.7	-0.3	-2.2	-0.1	-0.0	-0.4	1.6	0.1	-2.2	-0.1	-0.0
				Wind -X ecc.+	0.1	2.7	0.0	1.6	0.0	-0.0	0.1	-1.2	-0.0	1.6	0.0	-0.0
				Wind -X ecc.-	0.4	3.7	0.3	2.2	0.1	0.0	0.4	-1.6	-0.1	2.2	0.1	0.0
				Wind +Y ecc.+	-6.6	-2.0	-6.5	-1.1	-3.6	-0.0	-6.6	0.7	2.2	-1.1	-3.6	-0.0
				Wind +Y ecc.-	-5.0	2.4	-5.3	1.5	-3.0	0.0	-5.0	-1.2	1.9	1.5	-3.0	0.0
				Wind -Y ecc.+	6.6	2.0	6.5	1.1	3.6	0.0	6.6	-0.7	-2.2	1.1	3.6	0.0
				Wind -Y ecc.-	5.0	-2.4	5.3	-1.5	3.0	-0.0	5.0	1.2	-1.9	-1.5	3.0	-0.0
				Earthquake X Mode 1	-10.7	-23.2	-7.5	-13.5	-4.0	-0.1	-10.7	9.3	2.0	-13.5	-4.0	-0.1
				Earthquake X Mode 2	-12.8	17.2	-10.4	10.1	-5.5	-0.1	-12.8	-6.9	2.9	10.1	-5.5	-0.1
				Earthquake X Mode 3	-4.8	1.0	-4.2	0.7	-2.3	0.0	-4.8	-0.6	1.4	0.7	-2.3	0.0
				Earthquake X Mode 4	0.2	-3.1	-0.7	-2.0	-0.4	-0.0	0.2	1.6	0.3	-2.0	-0.4	-0.0
				Earthquake X Mode 5	0.3	2.3	-1.0	1.5	-0.6	-0.0	0.3	-1.2	0.5	1.5	-0.6	-0.0
				Earthquake X Mode 6	0.1	0.0	-0.5	0.0	-0.3	0.0	0.1	-0.0	0.2	0.0	-0.3	0.0
				Earthquake X Mode 7	0.0	-0.9	-0.1	-0.6	-0.0	-0.0	0.0	0.6	0.0	-0.6	-0.0	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0	-0.0	0.1	0.4	-0.1	-0.4	0.0
				Earthquake X Mode 9	0.0	-0.8	0.5	-0.5	0.4	0.0	0.0	0.5	-0.4	-0.5	0.4	0.0
				Earthquake Y Mode 1	-4.9	-10.5	-3.4	-6.1	-1.8	-0.0	-4.9	4.2	0.9	-6.1	-1.8	-0.0
				Earthquake Y Mode 2	-4.0	5.3	-3.2	3.1	-1.7	-0.0	-4.0	-2.1	0.9	3.1	-1.7	-0.0



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C5	techo	50x50	12.00/14.40	Self weight	235.3	1.2	92.3	1.6	66.8	0.0	220.6	-2.6	-68.0	1.6	66.8	0.0
				Dead load	10.0	-0.5	6.5	-0.4	3.3	-0.0	10.0	0.3	-1.3	-0.4	3.3	-0.0
				Live load	44.0	-0.1	38.7	0.0	23.3	0.0	44.0	-0.2	-17.2	0.0	23.3	0.0
				Wind +X ecc.+	-0.0	-0.8	0.0	-0.6	0.0	0.0	-0.0	0.7	-0.0	-0.6	0.0	0.0
				Wind +X ecc.-	-0.1	-1.1	-0.2	-0.9	-0.2	-0.0	-0.1	1.0	0.2	-0.9	-0.2	-0.0
				Wind -X ecc.+	0.0	0.8	-0.0	0.6	-0.0	-0.0	0.0	-0.7	0.0	0.6	-0.0	-0.0
				Wind -X ecc.-	0.1	1.1	0.2	0.9	0.2	0.0	0.1	-1.0	-0.2	0.9	0.2	0.0
				Wind +Y ecc.+	-1.0	-1.1	-2.4	-0.9	-1.9	-0.0	-1.0	0.9	2.2	-0.9	-1.9	-0.0
				Wind +Y ecc.-	-0.4	0.1	-1.2	0.1	-0.9	0.0	-0.4	-0.2	1.1	0.1	-0.9	0.0
				Wind -Y ecc.+	1.0	1.1	2.4	0.9	1.9	0.0	1.0	-0.9	-2.2	0.9	1.9	0.0
				Wind -Y ecc.-	0.4	-0.1	1.2	-0.1	0.9	-0.0	0.4	0.2	-1.1	-0.1	0.9	-0.0
				Earthquake X Mode 1	-3.6	-10.0	-7.9	-7.7	-6.2	-0.1	-3.6	8.5	7.0	-7.7	-6.2	-0.1
				Earthquake X Mode 2	-3.0	6.8	-8.2	5.3	-6.5	-0.1	-3.0	-5.8	7.3	5.3	-6.5	-0.1
				Earthquake X Mode 3	-0.4	-0.1	-1.2	-0.1	-0.9	0.0	-0.4	0.0	1.1	-0.1	-0.9	0.0
				Earthquake X Mode 4	0.6	2.7	1.9	1.9	1.3	0.0	0.6	-1.8	-1.2	1.9	1.3	0.0
				Earthquake X Mode 5	0.5	-2.1	1.9	-1.4	1.3	0.0	0.5	1.3	-1.2	-1.4	1.3	0.0
				Earthquake X Mode 6	0.1	0.1	0.4	0.0	0.3	-0.0	0.1	-0.0	-0.2	0.0	0.3	-0.0
				Earthquake X Mode 7	-0.1	-1.0	-0.5	-0.6	-0.3	-0.0	-0.1	0.4	0.2	-0.6	-0.3	-0.0
				Earthquake X Mode 8	-0.1	-0.3	-0.6	-0.2	-0.3	-0.0	-0.1	0.1	0.2	-0.2	-0.3	-0.0
				Earthquake X Mode 9	0.2	-0.8	0.9	-0.5	0.5	0.0	0.2	0.3	-0.4	-0.5	0.5	0.0
				Earthquake Y Mode 1	-1.6	-4.5	-3.6	-3.5	-2.8	-0.0	-1.6	3.8	3.2	-3.5	-2.8	-0.0
				Earthquake Y Mode 2	-0.9	2.1	-2.5	1.6	-2.0	-0.0	-0.9	-1.8	2.3	1.6	-2.0	-0.0
				Earthquake Y Mode 3	-2.8	-0.6	-7.2	-0.4	-5.8	0.0	-2.8	0.3	6.7	-0.4	-5.8	0.0
				Earthquake Y Mode 4	0.1	0.5	0.4	0.4	0.2	0.0	0.1	-0.3	-0.2	0.4	0.2	0.0
				Earthquake Y Mode 5	0.1	-0.4	0.3	-0.3	0.2	0.0	0.1	0.2	-0.2	-0.3	0.2	0.0
				Earthquake Y Mode 6	0.8	0.5	3.0	0.3	2.1	-0.0	0.8	-0.3	-2.0	0.3	2.1	-0.0
				Earthquake Y Mode 7	-0.0	-0.3	-0.2	-0.2	-0.1	-0.0	-0.0	0.1	0.1	-0.2	-0.1	-0.0
				Earthquake Y Mode 8	-0.3	-0.7	-1.4	-0.4	-0.8	-0.0	-0.3	0.3	0.6	-0.4	-0.8	-0.0
				Earthquake Y Mode 9	0.1	-0.3	0.3	-0.2	0.2	0.0	0.1	0.1	-0.1	-0.2	0.2	0.0
	Floor 4	50x50	9.00/11.40	Self weight	464.5	-2.2	78.3	-2.3	63.6	0.0	449.8	3.3	-74.5	-2.3	63.6	0.0
				Dead load	64.5	0.1	11.8	0.2	10.4	-0.0	64.5	-0.3	-13.2	0.2	10.4	-0.0
				Live load	156.1	-0.7	51.6	-0.7	44.0	0.0	156.1	0.9	-53.9	-0.7	44.0	0.0
				Wind +X ecc.+	-0.0	-1.3	0.0	-1.2	0.0	0.0	-0.0	1.6	-0.0	-1.2	0.0	0.0
				Wind +X ecc.-	-0.4	-1.7	-0.4	-1.6	-0.4	-0.0	-0.4	2.2	0.5	-1.6	-0.4	-0.0
				Wind -X ecc.+	0.0	1.3	-0.0	1.2	-0.0	-0.0	0.0	-1.6	0.0	1.2	-0.0	-0.0
				Wind -X ecc.-	0.4	1.7	0.4	1.6	0.4	0.0	0.4	-2.2	-0.5	1.6	0.4	0.0
				Wind +Y ecc.+	-3.2	-1.5	-3.5	-1.4	-3.5	-0.0	-3.2	1.8	4.7	-1.4	-3.5	-0.0
				Wind +Y ecc.-	-1.4	0.4	-1.7	0.4	-1.7	0.0	-1.4	-0.6	2.3	0.4	-1.7	0.0
				Wind -Y ecc.+	3.2	1.5	3.5	1.4	3.5	0.0	3.2	-1.8	-4.7	1.4	3.5	0.0
				Wind -Y ecc.-	1.4	-0.4	1.7	-0.4	1.7	-0.0	1.4	0.6	-2.3	-0.4	1.7	-0.0
				Earthquake X Mode 1	-10.6	-14.7	-11.4	-13.6	-10.7	-0.1	-10.6	17.9	14.3	-13.6	-10.7	-0.1
				Earthquake X Mode 2	-9.3	10.3	-11.3	9.6	-10.4	-0.1	-9.3	-12.8	13.7	9.6	-10.4	-0.1
				Earthquake X Mode 3	-1.5	-0.0	-1.8	0.0	-1.7	0.0	-1.5	-0.1	2.3	0.0	-1.7	0.0
				Earthquake X Mode 4	1.6	3.0	2.1	2.1	1.4	0.0	1.6	-2.1	-1.3	2.1	1.4	0.0
				Earthquake X Mode 5	1.3	-2.3	2.0	-1.5	1.3	0.0	1.3	1.4	-1.2	-1.5	1.3	0.0
				Earthquake X Mode 6	0.3	0.0	0.4	0.0	0.3	-0.0	0.3	-0.0	-0.3	0.0	0.3	-0.0
				Earthquake X Mode 7	-0.2	-0.2	-0.1	0.1	0.1	0.0	-0.2	-0.4	-0.2	0.1	0.1	0.0
				Earthquake X Mode 8	-0.2	-0.0	-0.1	0.0	0.1	0.0	-0.2	-0.1	-0.2	0.0	0.1	0.0
				Earthquake X Mode 9	0.2	-0.1	0.1	0.1	-0.1	-0.0	0.2	-0.3	0.4	0.1	-0.1	-0.0
				Earthquake Y Mode 1	-4.8	-6.7	-5.2	-6.2	-4.9	-0.1	-4.8	8.1	6.5	-6.2	-4.9	-0.1
				Earthquake Y Mode 2	-2.9	3.2	-3.5	3.0	-3.2	-0.0	-2.9	-3.9	4.2	3.0	-3.2	-0.0
				Earthquake Y Mode 3	-9.0	-0.3	-11.2	0.0	-10.5	0.1	-9.0	-0.4	14.1	0.0	-10.5	0.1
				Earthquake Y Mode 4	0.3	0.6	0.4	0.4	0.3	0.0	0.3	-0.4	-0.3	0.4	0.3	0.0
				Earthquake Y Mode 5	0.2	-0.4	0.4	-0.3	0.2	0.0	0.2	0.3	-0.2	-0.3	0.2	0.0
				Earthquake Y Mode 6	2.3	0.3	3.6	0.1	2.4	-0.0	2.3	-0.1	-2.3	0.1	2.4	-0.0
				Earthquake Y Mode 7	-0.1	-0.1	-0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0
				Earthquake Y Mode 8	-0.4	-0.0	-0.3	0.1	0.1	0.0	-0.4	-0.3	-0.6	0.1	0.1	0.0
				Earthquake Y Mode 9	0.1	-0.1	0.1	0.0	-0.0	-0.0	0.1	-0.1	0.2	0.0	-0.0	-0.0
Floor 3	50x50	6.00/8.40	Self weight	693.6	-1.2	79.4	-0.9	67.0	0.0	678.9	1.0	-81.3	-0.9	67.0	0.0	
				Dead load	119.0	-0.0	10.4	-0.0	8.6	-0.0	119.0	0.0	-10.4	-0.0	8.6	-0.0
				Live load	268.7	-0.6	47.3	-0.6	39.5	0.0	268.7	0.7	-47.4	-0.6	39.5	0.0
				Wind +X ecc.+	-0.1	-1.8	0.0	-1.6	0.0	0.0	-0.1	2.1	-0.0	-1.6	0.0	0.0
				Wind +X ecc.-	-0.8	-2.4	-0.6	-2.2	-0.5	-0.0	-0.8	2.8	0.6	-2.2	-0.5	-0.0
				Wind -X ecc.+	0.1	1.8	-0.0	1.6	-0.0	-0.0	0.1	-2.1	0.0	1.6	-0.0	-0.0
				Wind -X ecc.-	0.8	2.4	0.6	2.2	0.5	0.0	0.8	-2.8	-0.6	2.2	0.5	0.0
				Wind +Y ecc.+	-6.0	-2.0	-4.9	-1.8	-4.5	-0.0	-6.0	2.2	5.8	-1.8	-4.5	-0.0
				Wind +Y ecc.-	-2.7	0.7	-2.3	0.7	-2.1	0.0	-2.7	-1.0	2.7	0.7	-2.1	0.0
				Wind -Y ecc.+	6.0	2.0	4.9	1.8	4.5	0.0	6.0	-2.2	-5.8	1.8	4.5	0.0
				Wind -Y ecc.-	2.7	-0.7	2.3	-0.7	2.1	-0.0	2.7	1.0	-2.7	-0.7	2.1	-0.0
				Earthquake X Mode 1	-19.2	-19.4	-14.9	-16.8	-13.0	-0.2	-19.2	20.9	16.2	-16.8	-13.0	-0.2
				Earthquake X Mode 2	-16.7	13.8	-14.3	11.9	-12.4	-0.1	-16.7	-14.8	15.4	11.9	-12.4	-0.1
				Earthquake X Mode 3	-2.7	0.1	-2.4	0.1	-2.1	0.0	-2.7	-0.2	2.6	0.1	-2.1	0.0
				Earthquake X Mode 4	2.1	1.4	1.0	0.5	0.3	0.0	2.1	0.1	0.2	0.5	0.3	0.0
				Earthquake X Mode 5	1.7	-1.0	1.0	-0.3	0.3	0.0	1.7	-0.3	0.3	-0.3	0.3	0.0
				Earthquake X Mode 6	0.4	-0.0	0.2	-0.0	0.1	-0.0	0.4	0.0	0.0	-0.0	0.1	-0.0
				Earthquake X Mode 7	-0.1	0.9	0.5	0.7	0.4	0.0	-0.1	-0.8	-0.4	0.7	0.4	0.0
				Earthquake X Mode 8	-0.1	0.2	0.5	0.2	0.4	0.0	-0.1	-0.2	-0.4	0.2	0.4	0.0
				Earthquake X Mode 9	0.1	0.7	-0.8	0.6	-0.6	-0.0	0.1	-0.6	0.7	0.6	-0.6	-0.0
				Earthquake Y Mode 1	-8.7	-8.8	-6.8	-7.6	-5.9	-0.1	-8.7	9.5	7.3	-7.6	-5.9	-0.1
				Earthquake Y Mode 2	-5.2	4.3	-4.4	3.7	-3.8	-0.0	-5.2	-4.6	4.7	3.7	-3.8	-0.0
				Earthquake Y Mode 3	-16.6	0.4	-14.6	0.6	-12.6	0.1	-16.6	-1.2	15.8	0.6	-12.6	0.1
				Earthquake Y Mode 4	0.4	0.3	0.2									



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	50x50	3.00/5.40	Self weight	923.2	-0.9	88.9	-0.9	71.0	0.0	908.5	1.3	-81.5	-0.9	71.0	0.0
				Dead load	173.6	0.3	12.3	0.2	9.9	0.0	173.6	-0.2	-11.5	0.2	9.9	0.0
				Live load	381.4	-0.5	54.1	-0.4	43.3	0.0	381.4	0.6	-49.9	-0.4	43.3	0.0
				Wind +X ecc.+	-0.1	-2.4	0.0	-1.9	0.0	0.0	-0.1	2.2	-0.0	-1.9	0.0	0.0
				Wind +X ecc.-	-1.2	-3.1	-0.7	-2.5	-0.6	-0.0	-1.2	2.9	0.7	-2.5	-0.6	-0.0
				Wind -X ecc.+	0.1	2.4	-0.0	1.9	-0.0	-0.0	0.1	-2.2	0.0	1.9	-0.0	-0.0
				Wind -X ecc.-	1.2	3.1	0.7	2.5	0.6	0.0	1.2	-2.9	-0.7	2.5	0.6	0.0
				Wind +Y ecc.+	-9.1	-2.5	-6.4	-1.9	-5.1	-0.0	-9.1	2.1	5.9	-1.9	-5.1	-0.0
				Wind +Y ecc.-	-4.1	1.1	-3.0	1.0	-2.4	0.0	-4.1	-1.3	2.8	1.0	-2.4	0.0
				Wind -Y ecc.+	9.1	2.5	6.4	1.9	5.1	0.0	9.1	-2.1	-5.9	1.9	5.1	0.0
				Wind -Y ecc.-	4.1	-1.1	3.0	-1.0	2.4	-0.0	4.1	1.3	-2.8	-1.0	2.4	-0.0
				Earthquake X Mode 1	-28.2	-22.9	-17.6	-17.9	-13.5	-0.2	-28.2	20.0	14.8	-17.9	-13.5	-0.2
				Earthquake X Mode 2	-24.5	16.4	-16.6	12.6	-12.7	-0.1	-24.5	-13.9	13.8	12.6	-12.7	-0.1
				Earthquake X Mode 3	-4.0	0.2	-2.8	0.3	-2.1	0.0	-4.0	-0.4	2.3	0.3	-2.1	0.0
				Earthquake X Mode 4	1.9	-1.2	-0.8	-1.4	-0.9	-0.0	1.9	2.1	1.4	-1.4	-0.9	-0.0
				Earthquake X Mode 5	1.5	1.0	-0.8	1.1	-0.9	-0.0	1.5	-1.6	1.4	1.1	-0.9	-0.0
				Earthquake X Mode 6	0.3	-0.0	-0.2	-0.0	-0.2	0.0	0.3	0.0	0.3	-0.0	-0.2	0.0
				Earthquake X Mode 7	0.0	0.3	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0
				Earthquake X Mode 8	0.0	0.0	0.2	-0.0	0.0	-0.0	0.0	0.1	0.1	-0.0	0.0	-0.0
				Earthquake X Mode 9	-0.1	0.3	-0.3	0.1	-0.0	-0.0	-0.1	0.1	-0.2	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-12.8	-10.4	-8.0	-8.1	-6.1	-0.1	-12.8	9.1	6.7	-8.1	-6.1	-0.1
				Earthquake Y Mode 2	-7.6	5.1	-5.1	3.9	-3.9	-0.0	-7.6	-4.3	4.3	3.9	-3.9	-0.0
				Earthquake Y Mode 3	-24.7	1.4	-17.1	1.6	-13.2	0.1	-24.7	-2.3	14.5	1.6	-13.2	0.1
				Earthquake Y Mode 4	0.4	-0.2	-0.2	-0.3	-0.2	-0.0	0.4	0.4	0.3	-0.3	-0.2	-0.0
				Earthquake Y Mode 5	0.3	0.2	-0.1	0.2	-0.2	-0.0	0.3	-0.3	0.3	0.2	-0.2	-0.0
				Earthquake Y Mode 6	2.8	-0.3	-1.3	-0.2	-1.6	0.0	2.8	0.2	2.5	-0.2	-1.6	0.0
				Earthquake Y Mode 7	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				Earthquake Y Mode 8	0.1	0.1	0.5	-0.0	0.1	-0.0	0.1	0.2	0.3	-0.0	0.1	-0.0
				Earthquake Y Mode 9	-0.0	0.1	-0.1	0.0	-0.0	-0.0	-0.0	0.1	-0.1	0.0	-0.0	-0.0
	Floor 1	50x50	0.00/2.40	Self weight	1152.2	-0.2	44.6	-0.2	49.6	0.0	1137.5	0.4	-74.5	-0.2	49.6	0.0
				Dead load	228.4	0.2	6.1	0.2	6.9	0.0	228.4	-0.3	-10.5	0.2	6.9	0.0
				Live load	493.6	-0.1	26.9	-0.2	29.9	0.0	493.6	0.3	-45.0	-0.2	29.9	0.0
				Wind +X ecc.+	-0.2	-2.7	0.0	-1.6	0.0	0.0	-0.2	1.2	0.0	-1.6	0.0	0.0
				Wind +X ecc.-	-1.6	-3.7	-0.9	-2.2	-0.5	-0.0	-1.6	1.6	0.3	-2.2	-0.5	-0.0
				Wind -X ecc.+	0.2	2.7	-0.0	1.6	-0.0	-0.0	0.2	-1.2	-0.0	1.6	-0.0	-0.0
				Wind -X ecc.-	1.6	3.7	0.9	2.2	0.5	0.0	1.6	-1.6	-0.3	2.2	0.5	0.0
				Wind +Y ecc.+	-11.9	-2.1	-8.0	-1.3	-4.6	-0.0	-11.9	0.9	3.0	-1.3	-4.6	-0.0
				Wind +Y ecc.-	-5.3	2.4	-3.9	1.5	-2.2	0.0	-5.3	-1.2	1.4	1.5	-2.2	0.0
				Wind -Y ecc.+	11.9	2.1	8.0	1.3	4.6	0.0	11.9	-0.9	-3.0	1.3	4.6	0.0
				Wind -Y ecc.-	5.3	-2.4	3.9	-1.5	2.2	-0.0	5.3	1.2	-1.4	-1.5	2.2	-0.0
				Earthquake X Mode 1	-35.5	-23.8	-18.3	-14.1	-10.3	-0.1	-35.5	10.2	6.4	-14.1	-10.3	-0.1
				Earthquake X Mode 2	-30.5	17.0	-17.5	9.8	-9.7	-0.1	-30.5	-6.5	5.9	9.8	-9.7	-0.1
				Earthquake X Mode 3	-5.0	1.0	-3.1	0.6	-1.7	0.0	-5.0	-0.5	1.0	0.6	-1.7	0.0
				Earthquake X Mode 4	1.3	-3.1	-2.1	-2.0	-1.3	-0.0	1.3	1.7	1.0	-2.0	-1.3	-0.0
				Earthquake X Mode 5	1.0	2.3	-2.1	1.5	-1.3	-0.0	1.0	-1.2	1.0	1.5	-1.3	-0.0
				Earthquake X Mode 6	0.2	0.0	-0.5	0.0	-0.3	0.0	0.2	-0.0	0.2	0.0	-0.3	0.0
				Earthquake X Mode 7	-0.1	-0.9	-0.5	-0.7	-0.4	-0.0	-0.1	0.7	0.3	-0.7	-0.4	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0	-0.0	0.1	0.4	-0.1	-0.4	0.0
				Earthquake X Mode 9	0.1	-0.7	0.9	-0.5	0.6	0.0	0.1	0.5	-0.6	-0.5	0.6	0.0
				Earthquake Y Mode 1	-16.1	-10.8	-8.3	-6.4	-4.7	-0.0	-16.1	4.6	2.9	-6.4	-4.7	-0.0
				Earthquake Y Mode 2	-9.4	5.3	-5.4	3.0	-3.0	-0.0	-9.4	-2.0	1.8	3.0	-3.0	-0.0
				Earthquake Y Mode 3	-31.1	6.0	-18.9	3.8	-10.5	0.1	-31.1	-3.2	6.4	3.8	-10.5	0.1
				Earthquake Y Mode 4	0.3	-0.6	-0.4	-0.4	-0.3	-0.0	0.3	0.3	0.2	-0.4	-0.3	-0.0
				Earthquake Y Mode 5	0.2	0.4	-0.4	0.3	-0.2	-0.0	0.2	-0.2	0.2	0.3	-0.2	-0.0
				Earthquake Y Mode 6	1.8	0.2	-3.8	0.1	-2.3	0.0	1.8	-0.1	1.8	0.1	-2.3	0.0
				Earthquake Y Mode 7	-0.0	-0.3	-0.2	-0.2	-0.1	-0.0	-0.0	0.2	0.1	-0.2	-0.1	-0.0
				Earthquake Y Mode 8	-0.1	-0.5	-1.3	-0.4	-0.9	0.0	-0.1	0.4	0.9	-0.4	-0.9	0.0
				Earthquake Y Mode 9	0.0	-0.3	0.3	-0.2	0.2	0.0	0.0	0.2	-0.2	-0.2	0.2	0.0
C6	techo	50x50	12.00/14.40	Self weight	114.9	-51.9	50.5	-39.5	39.1	0.0	100.2	42.8	-43.3	-39.5	39.1	0.0
				Dead load	6.0	-9.5	7.9	-5.2	4.2	-0.0	6.0	2.9	-2.1	-5.2	4.2	-0.0
				Live load	19.5	-18.0	18.6	-11.2	11.8	0.0	19.5	9.0	-9.8	-11.2	11.8	0.0
				Wind +X ecc.+	0.1	-0.4	0.0	-0.4	0.0	0.0	0.1	0.5	-0.0	-0.4	0.0	0.0
				Wind +X ecc.-	0.1	-0.5	-0.1	-0.5	-0.2	-0.0	0.1	0.7	0.2	-0.5	-0.2	-0.0
				Wind -X ecc.+	-0.1	0.4	-0.0	0.4	-0.0	-0.0	-0.1	-0.5	0.0	0.4	-0.0	-0.0
				Wind -X ecc.-	-0.1	0.5	0.1	0.5	0.2	0.0	-0.1	-0.7	-0.2	0.5	0.2	0.0
				Wind +Y ecc.+	-0.5	-0.3	-1.2	-0.3	-1.3	-0.0	-0.5	0.4	1.9	-0.3	-1.3	-0.0
				Wind +Y ecc.-	-0.3	0.1	-0.5	0.1	-0.5	0.0	-0.3	-0.2	0.7	0.1	-0.5	0.0
				Wind -Y ecc.+	0.5	0.3	1.2	0.3	1.3	0.0	0.5	-0.4	-1.9	0.3	1.3	0.0
				Wind -Y ecc.-	0.3	-0.1	0.5	-0.1	0.5	-0.0	0.3	0.2	-0.7	-0.1	0.5	-0.0
				Earthquake X Mode 1	-0.9	-3.8	-4.5	-3.7	-4.8	-0.1	-0.9	5.1	7.0	-3.7	-4.8	-0.1
				Earthquake X Mode 2	-3.4	4.2	-4.6	3.9	-4.6	-0.1	-3.4	-5.1	6.5	3.9	-4.6	-0.1
				Earthquake X Mode 3	-0.2	0.0	-0.4	0.1	-0.4	0.0	-0.2	-0.1	0.6	0.1	-0.4	0.0
				Earthquake X Mode 4	0.1	1.6	1.7	1.1	1.2	0.0	0.1	-1.2	-1.3	1.1	1.2	0.0
				Earthquake X Mode 5	0.6	-1.4	1.5	-1.0	1.0	0.0	0.6	1.1	-1.1	-1.0	1.0	0.0
				Earthquake X Mode 6	0.1	0.0	0.2	0.0	0.1	-0.0	0.1	-0.0	-0.2	0.0	0.1	-0.0
				Earthquake X Mode 7	-0.0	-0.8	-0.8	-0.4	-0.4	-0.0	-0.0	0.3	0.2	-0.4	-0.4	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.3	-0.0	-0.0	0.1	0.2	-0.1	-0.3	-0.0
				Earthquake X Mode 9	0.2	-0.6	1.0	-0.4	0.5	0.0	0.2	0.2	-0.3	-0.4	0.5	0.0
				Earthquake Y Mode 1	-0.4	-1.7	-2.0	-1.7	-2.2	-0.0	-0.4	2.3	3.2	-1.7	-2.2	-0.0
				Earthquake Y Mode 2	-1.1	1.3	-1.4	1.2	-1.4	-0.0	-1.1	-1.6	2.0	1.2	-1.4	-0.0



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 4	50x50	9.00/11.40	Self weight	234.5	-37.3	33.8	-29.5	26.0	0.0	219.8	33.5	-28.6	-29.5	26.0	0.0	
				Dead load	45.7	-13.9	13.8	-12.0	12.1	-0.0	45.7	14.9	-15.4	-12.0	12.1	-0.0
				Live load	70.9	-22.3	21.8	-19.0	18.4	0.0	70.9	23.3	-22.4	-19.0	18.4	0.0
				Wind +X ecc.+	0.5	-0.5	0.0	-0.6	0.0	0.0	0.5	1.0	-0.0	-0.6	0.0	0.0
				Wind +X ecc.-	0.4	-0.7	-0.2	-0.8	-0.3	-0.0	0.4	1.3	0.4	-0.8	-0.3	-0.0
				Wind -X ecc.+	-0.5	0.5	-0.0	0.6	-0.0	-0.0	-0.5	-1.0	0.0	0.6	-0.0	-0.0
				Wind -X ecc.-	-0.4	0.7	0.2	0.8	0.3	0.0	-0.4	-1.3	-0.4	0.8	0.3	0.0
				Wind +Y ecc.+	-1.4	-0.5	-1.5	-0.6	-1.9	-0.0	-1.4	0.9	3.1	-0.6	-1.9	-0.0
				Wind +Y ecc.-	-0.8	0.2	-0.6	0.3	-0.6	0.0	-0.8	-0.5	0.9	0.3	-0.6	0.0
				Wind -Y ecc.+	1.4	0.5	1.5	0.6	1.9	0.0	1.4	-0.9	-3.1	0.6	1.9	0.0
				Wind -Y ecc.-	0.8	-0.2	0.6	-0.3	0.6	-0.0	0.8	0.5	-0.9	-0.3	0.6	-0.0
				Earthquake X Mode 1	-1.7	-6.3	-6.4	-6.8	-7.4	-0.1	-1.7	10.0	11.3	-6.8	-7.4	-0.1
				Earthquake X Mode 2	-10.3	5.3	-6.0	5.5	-6.6	-0.1	-10.3	-7.9	9.9	5.5	-6.6	-0.1
				Earthquake X Mode 3	-0.7	0.0	-0.6	0.1	-0.6	0.0	-0.7	-0.1	1.0	0.1	-0.6	0.0
				Earthquake X Mode 4	0.1	2.0	2.2	1.2	1.2	0.0	0.1	-0.9	-0.7	1.2	1.2	0.0
				Earthquake X Mode 5	1.7	-1.6	1.9	-0.9	1.0	0.0	1.7	0.6	-0.5	-0.9	1.0	0.0
				Earthquake X Mode 6	0.1	0.0	0.3	0.0	0.1	-0.0	0.1	0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 7	0.0	-0.2	-0.3	0.1	0.1	0.0	0.0	-0.4	-0.5	0.1	0.1	0.0
				Earthquake X Mode 8	-0.1	-0.0	-0.2	0.0	0.1	0.0	-0.1	-0.1	-0.3	0.0	0.1	0.0
				Earthquake X Mode 9	0.3	-0.2	0.3	0.1	-0.1	-0.0	0.3	-0.4	0.6	0.1	-0.1	-0.0
				Earthquake Y Mode 1	-0.8	-2.8	-2.9	-3.1	-3.3	-0.1	-0.8	4.6	5.1	-3.1	-3.3	-0.1
				Earthquake Y Mode 2	-3.2	1.6	-1.9	1.7	-2.0	-0.0	-3.2	-2.4	3.0	1.7	-2.0	-0.0
				Earthquake Y Mode 3	-4.1	0.1	-3.7	0.4	-4.0	0.1	-4.1	-0.7	5.9	0.4	-4.0	0.1
				Earthquake Y Mode 4	0.0	0.4	0.4	0.2	0.2	0.0	0.0	-0.2	-0.1	0.2	0.2	0.0
				Earthquake Y Mode 5	0.3	-0.3	0.4	-0.2	0.2	0.0	0.3	0.1	-0.1	-0.2	0.2	0.0
				Earthquake Y Mode 6	1.1	0.1	2.2	0.0	1.2	-0.0	1.1	0.1	-0.7	0.0	1.2	-0.0
				Earthquake Y Mode 7	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0
				Earthquake Y Mode 8	-0.2	-0.1	-0.4	0.1	0.1	0.0	-0.2	-0.3	-0.7	0.1	0.1	0.0
				Earthquake Y Mode 9	0.1	-0.1	0.1	0.0	-0.0	-0.0	0.1	-0.1	0.2	0.0	-0.0	-0.0
Floor 3	50x50	6.00/8.40	Self weight	353.2	-39.6	36.8	-33.8	31.5	0.0	338.5	41.7	-38.7	-33.8	31.5	0.0	
				Dead load	85.7	-12.3	11.9	-10.3	10.0	-0.0	85.7	12.3	-12.0	-10.3	10.0	-0.0
				Live load	122.4	-20.5	20.1	-17.2	16.8	0.0	122.4	20.8	-20.3	-17.2	16.8	0.0
				Wind +X ecc.+	1.0	-0.9	-0.0	-0.9	-0.0	0.0	1.0	1.2	-0.0	-0.9	-0.0	0.0
				Wind +X ecc.-	0.8	-1.2	-0.4	-1.2	-0.4	-0.0	0.8	1.6	0.6	-1.2	-0.4	-0.0
				Wind -X ecc.+	-1.0	0.9	0.0	0.9	0.0	-0.0	-1.0	-1.2	0.0	0.9	0.0	-0.0
				Wind -X ecc.-	-0.8	1.2	0.4	1.2	0.4	0.0	-0.8	-1.6	-0.6	1.2	0.4	0.0
				Wind +Y ecc.+	-2.4	-0.9	-2.6	-0.8	-2.7	-0.0	-2.4	1.1	3.8	-0.8	-2.7	-0.0
				Wind +Y ecc.-	-1.5	0.4	-0.9	0.5	-0.8	0.0	-1.5	-0.7	1.1	0.5	-0.8	0.0
				Wind -Y ecc.+	2.4	0.9	2.6	0.8	2.7	0.0	2.4	-1.1	-3.8	0.8	2.7	0.0
				Wind -Y ecc.-	1.5	-0.4	0.9	-0.5	0.8	-0.0	1.5	0.7	-1.1	-0.5	0.8	-0.0
				Earthquake X Mode 1	-2.4	-9.8	-10.5	-8.9	-9.7	-0.2	-2.4	11.6	12.9	-8.9	-9.7	-0.2
				Earthquake X Mode 2	-18.6	8.1	-9.1	7.3	-8.3	-0.1	-18.6	-9.3	10.7	7.3	-8.3	-0.1
				Earthquake X Mode 3	-1.2	0.1	-0.9	0.1	-0.8	0.0	-1.2	-0.2	1.0	0.1	-0.8	0.0
				Earthquake X Mode 4	0.1	1.3	1.5	0.3	0.3	0.0	0.1	0.6	0.8	0.3	0.3	0.0
				Earthquake X Mode 5	2.2	-1.0	1.3	-0.2	0.2	0.0	2.2	-0.5	0.8	-0.2	0.2	0.0
				Earthquake X Mode 6	0.2	-0.0	0.2	-0.0	0.0	-0.0	0.2	0.0	0.1	-0.0	0.0	-0.0
				Earthquake X Mode 7	-0.0	0.6	0.6	0.5	0.5	0.0	-0.0	-0.5	-0.5	0.5	0.5	0.0
				Earthquake X Mode 8	-0.0	0.2	0.4	0.1	0.3	0.0	-0.0	-0.1	-0.3	0.1	0.3	0.0
				Earthquake X Mode 9	0.1	0.5	-0.8	0.4	-0.6	-0.0	0.1	-0.4	0.6	0.4	-0.6	-0.0
				Earthquake Y Mode 1	-1.1	-4.4	-4.8	-4.0	-4.4	-0.1	-1.1	5.3	5.8	-4.0	-4.4	-0.1
				Earthquake Y Mode 2	-5.7	2.5	-2.8	2.2	-2.6	-0.0	-5.7	-2.9	3.3	2.2	-2.6	-0.0
				Earthquake Y Mode 3	-7.3	0.5	-5.7	0.8	-5.0	0.1	-7.3	-1.4	6.3	0.8	-5.0	0.1
				Earthquake Y Mode 4	0.0	0.2	0.3	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.0
				Earthquake Y Mode 5	0.4	-0.2	0.2	-0.0	0.0	0.0	0.4	-0.1	0.1	-0.0	0.0	0.0
				Earthquake Y Mode 6	1.4	-0.1	1.5	-0.1	0.3	-0.0	1.4	0.2	0.9	-0.1	0.3	-0.0
				Earthquake Y Mode 7	-0.0	0.2	0.2	0.1	0.1	0.0	-0.0	-0.2	-0.1	0.1	0.1	0.0
				Earthquake Y Mode 8	-0.1	0.4	1.0	0.3	0.7	0.0	-0.1	-0.3	-0.7	0.3	0.7	0.0
				Earthquake Y Mode 9	0.0	0.2	-0.3	0.1	-0.2	-0.0	0.0	-0.2	0.2	0.1	-0.2	-0.0
Floor 2	50x50	3.00/5.40	Self weight	472.0	-43.6	40.9	-34.7	32.2	0.0	457.3	39.8	-36.4	-34.7	32.2	0.0	
				Dead load	125.8	-14.3	14.3	-11.5	11.4	0.0	125.8	13.2	-13.2	-11.5	11.4	0.0
				Live load	173.9	-23.5	23.3	-18.8	18.5	0.0	173.9	21.6	-21.0	-18.8	18.5	0.0
				Wind +X ecc.+	1.5	-1.4	-0.0	-1.1	-0.0	0.0	1.5	1.2	0.0	-1.1	-0.0	0.0
				Wind +X ecc.-	1.2	-1.8	-0.6	-1.4	-0.5	-0.0	1.2	1.6	0.6	-1.4	-0.5	-0.0
				Wind -X ecc.+	-1.5	1.4	0.0	1.1	0.0	-0.0	-1.5	-1.2	-0.0	1.1	0.0	-0.0
				Wind -X ecc.-	-1.2	1.8	0.6	1.4	0.5	0.0	-1.2	-1.6	-0.6	1.4	0.5	0.0
				Wind +Y ecc.+	-3.6	-1.4	-4.2	-1.0	-3.2	-0.0	-3.6	1.0	3.4	-1.0	-3.2	-0.0
				Wind +Y ecc.-	-2.4	0.6	-1.3	0.6	-0.9	0.0	-2.4	-0.9	0.9	0.6	-0.9	0.0
				Wind -Y ecc.+	3.6	1.4	4.2	1.0	3.2	0.0	3.6	-1.0	-3.4	1.0	3.2	0.0
				Wind -Y ecc.-	2.4	-0.6	1.3	-0.6	0.9	-0.0	2.4	0.9	-0.9	-0.6	0.9	-0.0
				Earthquake X Mode 1	-3.0	-13.2	-14.8	-9.8	-10.5	-0.2	-3.0	10.2	10.4	-9.8	-10.5	-0.2
				Earthquake X Mode 2	-27.3	10.4	-12.4	7.6	-8.6	-0.1	-27.3	-7.8	8.3	7.6	-8.6	-0.1
				Earthquake X Mode 3	-1.7	0.1	-1.3	0.2	-0.8	0.0	-1.7	-0.3	0.7	0.2	-0.8	0.0
				Earthquake X Mode 4	0.2	-0.5	-0.4	-0.9	-0.9	-0.0	0.2	1.6	1.8	-0.9	-0.9	-0.0
				Earthquake X Mode 5	1.9	0.5	-0.3	0.7	-0.7	-0.0	1.9	-1.3	1.5	0.7	-0.7	-0.0
				Earthquake X Mode 6	0.2	-0.0	-0.1	-0.0	-0.1	0.0	0.2	0.0	0.2	-0.0	-0.1	0.0
				Earthquake X Mode 7	-0.0	0.4	0.4	0.1	0.0	0.0	-0.0	0.2	0.3	0.1	0.0	0.0
				Earthquake X Mode 8	-0.0	0.1	0.2	-0.0	0.0	-0.0	-0.0	0.1	0.2	-0.0	0.0	-0.0
				Earthquake X Mode 9	-0.1	0.3	-0.5	0.0	-0.0	-0.0	-0.1	0.2	-0.4	0.0	-0.0	-0.0
				Earthquake Y Mode 1	-1.3	-6.0	-6.7	-4.4	-4.8	-0.1	-1.3	4.6	4.7	-4.4	-4.8	-0.1
				Earthquake Y Mode 2	-8.4	3.2	-3.8	2.4	-2.7	-0.0	-8.4	-2.4	2.6	2.4	-2.7	-0.0



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	50x50	0.00/2.40	Self weight	589.6	-22.2	21.0	-24.7	23.3	0.0	574.9	37.0	-35.0	-24.7	23.3	0.0
				Dead load	165.6	-7.2	7.2	-8.0	8.1	0.0	165.6	12.0	-12.3	-8.0	8.1	0.0
				Live load	224.7	-11.8	11.8	-13.1	13.1	0.0	224.7	19.8	-19.7	-13.1	13.1	0.0
				Wind +X ecc.+	2.0	-2.3	0.0	-1.1	-0.0	0.0	2.0	0.4	0.0	-1.1	-0.0	0.0
				Wind +X ecc.-	1.6	-3.1	-1.2	-1.5	-0.6	-0.0	1.6	0.6	0.2	-1.5	-0.6	-0.0
				Wind -X ecc.+	-2.0	2.3	-0.0	1.1	0.0	-0.0	-2.0	-0.4	-0.0	1.1	0.0	-0.0
				Wind -X ecc.-	-1.6	3.1	1.2	1.5	0.6	0.0	-1.6	-0.6	-0.2	1.5	0.6	0.0
				Wind +Y ecc.+	-4.6	-1.7	-7.7	-0.8	-3.5	-0.0	-4.6	0.2	0.7	-0.8	-3.5	-0.0
				Wind +Y ecc.-	-3.1	2.1	-1.9	1.1	-0.8	0.0	-3.1	-0.7	0.0	1.1	-0.8	0.0
				Wind -Y ecc.+	4.6	1.7	7.7	0.8	3.5	0.0	4.6	-0.2	-0.7	0.8	3.5	0.0
				Wind -Y ecc.-	3.1	-2.1	1.9	-1.1	0.8	-0.0	3.1	0.7	-0.0	-1.1	0.8	-0.0
				Earthquake X Mode 1	-3.4	-19.5	-23.6	-9.4	-10.5	-0.1	-3.4	3.1	1.5	-9.4	-10.5	-0.1
				Earthquake X Mode 2	-34.2	14.4	-19.5	6.9	-8.4	-0.1	-34.2	-2.2	0.5	6.9	-8.4	-0.1
				Earthquake X Mode 3	-2.2	0.9	-1.5	0.5	-0.6	0.0	-2.2	-0.3	-0.0	0.5	-0.6	0.0
				Earthquake X Mode 4	0.2	-2.6	-3.0	-1.5	-1.6	-0.0	0.2	0.9	0.8	-1.5	-1.6	-0.0
				Earthquake X Mode 5	1.3	2.0	-2.6	1.1	-1.3	-0.0	1.3	-0.7	0.6	1.1	-1.3	-0.0
				Earthquake X Mode 6	0.1	0.0	-0.3	0.0	-0.2	0.0	0.1	-0.0	0.1	0.0	-0.2	0.0
				Earthquake X Mode 7	-0.0	-0.8	-0.8	-0.5	-0.5	-0.0	-0.0	0.5	0.5	-0.5	-0.5	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.3	0.0	-0.0	0.1	0.3	-0.1	-0.3	0.0
				Earthquake X Mode 9	0.1	-0.7	1.0	-0.4	0.6	0.0	0.1	0.4	-0.5	-0.4	0.6	0.0
				Earthquake Y Mode 1	-1.5	-8.9	-10.7	-4.3	-4.8	-0.0	-1.5	1.4	0.7	-4.3	-4.8	-0.0
				Earthquake Y Mode 2	-10.6	4.5	-6.0	2.1	-2.6	-0.0	-10.6	-0.7	0.2	2.1	-2.6	-0.0
				Earthquake Y Mode 3	-13.8	5.4	-9.4	3.1	-3.8	0.1	-13.8	-2.1	-0.2	3.1	-3.8	0.1
				Earthquake Y Mode 4	0.0	-0.5	-0.6	-0.3	-0.3	-0.0	0.0	0.2	0.2	-0.3	-0.3	-0.0
				Earthquake Y Mode 5	0.2	0.4	-0.5	0.2	-0.2	-0.0	0.2	-0.1	0.1	0.2	-0.2	-0.0
				Earthquake Y Mode 6	0.9	0.2	-2.7	0.1	-1.4	0.0	0.9	-0.2	0.7	0.1	-1.4	0.0
				Earthquake Y Mode 7	-0.0	-0.2	-0.2	-0.2	-0.2	-0.0	-0.0	0.1	0.1	-0.2	-0.2	-0.0
				Earthquake Y Mode 8	-0.1	-0.4	-1.2	-0.3	-0.8	0.0	-0.1	0.2	0.6	-0.3	-0.8	0.0
				Earthquake Y Mode 9	0.0	-0.2	0.4	-0.2	0.2	0.0	0.0	0.1	-0.2	-0.2	0.2	0.0
C7	techo	50x50	12.00/14.40	Self weight	150.3	37.1	-38.2	26.9	-26.8	0.0	135.6	-27.5	26.1	26.9	-26.8	0.0
				Dead load	24.5	10.3	-1.6	8.5	0.9	-0.0	24.5	-10.2	-3.6	8.5	0.9	-0.0
				Live load	27.8	17.1	-13.9	11.1	-8.4	0.0	27.8	-9.5	6.2	11.1	-8.4	0.0
				Wind +X ecc.+	-0.2	-0.5	-0.0	-0.4	-0.0	0.0	-0.2	0.5	0.0	-0.4	-0.0	0.0
				Wind +X ecc.-	-0.2	-0.5	0.5	-0.5	0.4	-0.0	-0.2	0.6	-0.4	-0.5	0.4	-0.0
				Wind -X ecc.+	0.2	0.5	0.0	0.4	0.0	-0.0	0.2	-0.5	-0.0	0.4	0.0	-0.0
				Wind -X ecc.-	0.2	0.5	-0.5	0.5	-0.4	0.0	0.2	-0.6	0.4	0.5	-0.4	0.0
				Wind +Y ecc.+	-0.1	-0.2	-0.1	-0.1	-0.1	-0.0	-0.1	0.2	0.1	-0.1	-0.1	-0.0
				Wind +Y ecc.-	-0.2	0.1	-2.6	0.1	-1.8	0.0	-0.2	-0.1	1.9	0.1	-1.8	0.0
				Wind -Y ecc.+	0.1	0.2	0.1	0.1	0.1	0.0	0.1	-0.2	-0.1	0.1	0.1	0.0
				Wind -Y ecc.-	0.2	-0.1	2.6	-0.1	1.8	-0.0	0.2	0.1	-1.9	-0.1	1.8	-0.0
				Earthquake X Mode 1	0.1	-3.1	12.4	-2.6	8.6	-0.1	0.1	3.2	-8.3	-2.6	8.6	-0.1
				Earthquake X Mode 2	3.1	6.4	6.8	5.3	4.7	-0.1	3.1	-6.4	-4.4	5.3	4.7	-0.1
				Earthquake X Mode 3	-0.4	-0.1	-3.4	-0.1	-2.4	0.0	-0.4	0.1	2.3	-0.1	-2.4	0.0
				Earthquake X Mode 4	-0.1	1.0	-3.9	0.7	-2.5	0.0	-0.1	-0.7	2.2	0.7	-2.5	0.0
				Earthquake X Mode 5	-1.0	-2.3	-2.4	-1.6	-1.5	0.0	-1.0	1.5	1.3	-1.6	-1.5	0.0
				Earthquake X Mode 6	0.1	0.0	0.6	0.0	0.4	-0.0	0.1	-0.0	-0.4	0.0	0.4	-0.0
				Earthquake X Mode 7	0.1	-0.4	1.6	-0.2	0.9	-0.0	0.1	0.2	-0.7	-0.2	0.9	-0.0
				Earthquake X Mode 8	-0.1	-0.2	-0.6	-0.1	-0.4	-0.0	-0.1	0.1	0.3	-0.1	-0.4	-0.0
				Earthquake X Mode 9	-0.3	-1.0	-0.5	-0.6	-0.3	0.0	-0.3	0.4	0.2	-0.6	-0.3	0.0
				Earthquake Y Mode 1	0.0	-1.4	5.6	-1.2	3.9	-0.0	0.0	1.5	-3.8	-1.2	3.9	-0.0
				Earthquake Y Mode 2	0.9	2.0	2.1	1.6	1.4	-0.0	0.9	-2.0	-1.4	1.6	1.4	-0.0
				Earthquake Y Mode 3	-2.5	-0.7	-20.9	-0.6	-14.6	0.0	-2.5	0.7	14.2	-0.6	-14.6	0.0
				Earthquake Y Mode 4	-0.0	0.2	-0.7	0.1	-0.5	0.0	-0.0	-0.1	0.4	0.1	-0.5	0.0
				Earthquake Y Mode 5	-0.2	-0.4	-0.4	-0.3	-0.3	0.0	-0.2	0.3	0.2	-0.3	-0.3	0.0
				Earthquake Y Mode 6	0.7	0.3	5.1	0.2	3.4	-0.0	0.7	-0.2	-3.0	0.2	3.4	-0.0
				Earthquake Y Mode 7	0.0	-0.1	0.5	-0.1	0.3	-0.0	0.0	0.0	-0.2	-0.1	0.3	-0.0
				Earthquake Y Mode 8	-0.3	-0.5	-1.5	-0.3	-0.9	-0.0	-0.3	0.2	0.7	-0.3	-0.9	-0.0
				Earthquake Y Mode 9	-0.1	-0.4	-0.2	-0.2	-0.1	0.0	-0.1	0.1	0.1	-0.2	-0.1	0.0
	Floor 4	50x50	9.00/11.40	Self weight	295.9	29.7	-33.3	24.3	-27.4	0.0	281.2	-28.7	32.4	24.3	-27.4	0.0
				Dead load	64.9	4.3	-10.9	3.2	-9.7	-0.0	64.9	-3.3	12.5	3.2	-9.7	-0.0
				Live load	89.7	19.1	-18.8	16.2	-16.0	0.0	89.7	-19.7	19.6	16.2	-16.0	0.0
				Wind +X ecc.+	-0.9	-0.8	-0.0	-0.8	-0.0	0.0	-0.9	1.2	0.0	-0.8	-0.0	0.0
				Wind +X ecc.-	-0.6	-0.9	1.0	-0.9	0.9	-0.0	-0.6	1.3	-1.1	-0.9	0.9	-0.0
				Wind -X ecc.+	0.9	0.8	0.0	0.8	0.0	-0.0	0.9	-1.2	-0.0	0.8	0.0	-0.0
				Wind -X ecc.-	0.6	0.9	-1.0	0.9	-0.9	0.0	0.6	-1.3	1.1	0.9	-0.9	0.0
				Wind +Y ecc.+	-0.5	-0.3	-0.7	-0.3	-0.7	-0.0	-0.5	0.4	0.9	-0.3	-0.7	-0.0
				Wind +Y ecc.-	-2.0	0.1	-5.2	0.1	-4.8	0.0	-2.0	-0.2	6.3	0.1	-4.8	0.0
				Wind -Y ecc.+	0.5	0.3	0.7	0.3	0.7	0.0	0.5	-0.4	-0.9	0.3	0.7	0.0
				Wind -Y ecc.-	2.0	-0.1	5.2	-0.1	4.8	-0.0	2.0	0.2	-6.3	-0.1	4.8	-0.0
				Earthquake X Mode 1	3.7	-5.0	21.2	-5.0	18.8	-0.1	3.7	6.9	-24.0	-5.0	18.8	-0.1
				Earthquake X Mode 2	14.7	10.2	10.2	10.0	8.9	-0.1	14.7	-13.7	-11.2	10.0	8.9	-0.1
				Earthquake X Mode 3	-2.7	-0.2	-6.0	-0.2	-5.4	0.0	-2.7	0.3	6.9	-0.2	-5.4	0.0
				Earthquake X Mode 4	-1.0	1.2	-4.6	0.8	-3.5	0.0	-1.0	-0.7	3.8	0.8	-3.5	0.0
				Earthquake X Mode 5	-3.3	-2.7	-2.5	-1.7	-1.9	0.0	-3.3	1.3	2.0	-1.7	-1.9	0.0
				Earthquake X Mode 6	0.4	0.0	0.8	0.0	0.6	-0.0	0.4	-0.0	-0.7	0.0	0.6	-0.0
				Earthquake X Mode 7	0.2	-0.1	0.2	0.0	-0.1	0.0	0.2	-0.2	0.4	0.0	-0.1	0.0
				Earthquake X Mode 8	-0.2	-0.0	-0.1	0.0	-0.0	0.0	-0.2	-0.1	-0.1	0.0	-0.0	0.0
				Earthquake X Mode 9	-0.4	-0.2	0.1	0.1	0.1	-0.0	-0.4	-0.5	-0.2	0.1	0.1	-0.0
				Earthquake Y Mode 1	1.7	-2.3	9.6	-2.2	8.5	-0.1	1.7	3.1	-10.9	-2.2	8.5	-0.1
				Earthquake Y Mode 2	4.5	3.1	3.1	3.1	2.7	-0.0	4.5	-4.2	-3.5	3.1	2.7	-0.0
				Earthquake Y Mode 3	-16.6	-1.4	-37.1	-1.3	-33.2	0.1	-16.6	1.7	42.6	-1.3	-33.2	0.1
				Earthquake Y Mode 4	-0.2											



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.40	Self weight	440.3	28.6	-33.2	24.4	-28.1	0.0	0.0	425.6	-30.0	34.2	24.4	-28.1	0.0
				Dead load	102.8	4.9	-8.8	4.3	-7.3	-0.0	102.8	-5.5	8.6	4.3	-7.3	-0.0
				Live load	150.5	17.2	-17.2	14.5	-14.4	0.0	150.5	-17.6	17.4	14.5	-14.4	0.0
				Wind +X ecc.+	-1.8	-1.2	-0.0	-1.2	-0.0	0.0	-1.8	1.5	0.0	-1.2	-0.0	0.0
				Wind +X ecc.-	-1.1	-1.4	1.3	-1.3	1.2	-0.0	-1.1	1.7	-1.5	-1.3	1.2	-0.0
				Wind -X ecc.+	1.8	1.2	0.0	1.2	0.0	-0.0	1.8	-1.5	-0.0	1.2	0.0	-0.0
				Wind -X ecc.-	1.1	1.4	-1.3	1.3	-1.2	0.0	1.1	-1.7	1.5	1.3	-1.2	0.0
				Wind +Y ecc.+	-1.3	-0.4	-1.2	-0.4	-1.1	-0.0	-1.3	0.5	1.5	-0.4	-1.1	-0.0
				Wind +Y ecc.-	-4.7	0.2	-7.5	0.2	-6.7	0.0	-4.7	-0.3	8.5	0.2	-6.7	0.0
				Wind -Y ecc.+	1.3	0.4	1.2	0.4	1.1	0.0	1.3	-0.5	-1.5	0.4	1.1	0.0
				Wind -Y ecc.-	4.7	-0.2	7.5	-0.2	6.7	-0.0	4.7	0.3	-8.5	-0.2	6.7	-0.0
				Earthquake X Mode 1	8.8	-7.1	27.0	-6.3	23.1	-0.2	8.8	8.0	-28.4	-6.3	23.1	-0.2
				Earthquake X Mode 2	30.0	14.3	12.0	12.5	10.1	-0.1	30.0	-15.8	-12.3	12.5	10.1	-0.1
				Earthquake X Mode 3	-5.9	-0.3	-7.8	-0.3	-6.7	0.0	-5.9	0.3	8.3	-0.3	-6.7	0.0
				Earthquake X Mode 4	-1.5	0.7	-1.8	0.2	-0.9	0.0	-1.5	0.2	0.3	0.2	-0.9	0.0
				Earthquake X Mode 5	-4.4	-1.4	-0.9	-0.3	-0.4	0.0	-4.4	-0.6	0.0	-0.3	-0.4	0.0
				Earthquake X Mode 6	0.6	0.0	0.4	-0.0	0.2	-0.0	0.6	0.0	-0.1	-0.0	0.2	-0.0
				Earthquake X Mode 7	-0.0	0.4	-1.6	0.3	-1.3	0.0	-0.0	-0.3	1.5	0.3	-1.3	0.0
				Earthquake X Mode 8	-0.0	0.2	0.7	0.1	0.5	0.0	-0.0	-0.1	-0.6	0.1	0.5	0.0
				Earthquake X Mode 9	0.0	0.9	0.5	0.7	0.4	-0.0	0.0	-0.7	-0.4	0.7	0.4	-0.0
				Earthquake Y Mode 1	4.0	-3.2	12.3	-2.9	10.5	-0.1	4.0	3.6	-12.9	-2.9	10.5	-0.1
				Earthquake Y Mode 2	9.3	4.4	3.7	3.9	3.1	-0.0	9.3	-4.9	-3.8	3.9	3.1	-0.0
				Earthquake Y Mode 3	-36.5	-2.0	-47.9	-1.6	-41.2	0.1	-36.5	1.8	51.0	-1.6	-41.2	0.1
				Earthquake Y Mode 4	-0.3	0.1	-0.3	0.0	-0.2	0.0	-0.3	0.0	0.1	0.0	-0.2	0.0
				Earthquake Y Mode 5	-0.8	-0.2	-0.2	-0.1	-0.1	0.0	-0.8	-0.1	0.0	-0.1	-0.1	0.0
				Earthquake Y Mode 6	4.6	0.1	3.0	-0.0	1.6	-0.0	4.6	0.1	-0.9	-0.0	1.6	-0.0
				Earthquake Y Mode 7	-0.0	0.1	-0.5	0.1	-0.4	0.0	-0.0	-0.1	0.4	0.1	-0.4	0.0
				Earthquake Y Mode 8	-0.0	0.5	1.6	0.3	1.3	0.0	-0.0	-0.4	-1.6	0.3	1.3	0.0
				Earthquake Y Mode 9	0.0	0.3	0.2	0.2	0.1	-0.0	0.0	-0.3	-0.2	0.2	0.1	-0.0
Floor 2	50x50	3.00/5.40	Self weight	582.1	28.3	-36.3	23.1	-29.4	0.0	0.0	567.4	-27.2	34.1	23.1	-29.4	0.0
				Dead load	140.3	4.4	-10.3	3.6	-8.3	0.0	140.3	-4.3	9.7	3.6	-8.3	0.0
				Live load	210.0	17.5	-19.2	14.3	-15.6	0.0	210.0	-16.9	18.1	14.3	-15.6	0.0
				Wind +X ecc.+	-3.0	-1.7	-0.1	-1.4	-0.0	0.0	-3.0	1.5	0.0	-1.4	-0.0	0.0
				Wind +X ecc.-	-1.7	-1.9	1.7	-1.5	1.4	-0.0	-1.7	1.7	-1.7	-1.5	1.4	-0.0
				Wind -X ecc.+	3.0	1.7	0.1	1.4	0.0	-0.0	3.0	-1.5	-0.0	1.4	0.0	-0.0
				Wind -X ecc.-	1.7	1.9	-1.7	1.5	-1.4	0.0	1.7	-1.7	1.7	-1.5	-1.4	0.0
				Wind +Y ecc.+	-2.4	-0.6	-2.0	-0.4	-1.7	-0.0	-2.4	0.5	2.2	-0.4	-1.7	-0.0
				Wind +Y ecc.-	-8.4	0.2	-10.2	0.2	-8.5	0.0	-8.4	-0.3	10.2	0.2	-8.5	0.0
				Wind -Y ecc.+	2.4	0.6	2.0	0.4	1.7	0.0	2.4	-0.5	-2.2	0.4	1.7	0.0
				Wind -Y ecc.-	8.4	-0.2	10.2	-0.2	8.5	-0.0	8.4	0.3	-10.2	-0.2	8.5	-0.0
				Earthquake X Mode 1	14.6	-8.9	31.1	-6.8	25.0	-0.2	14.6	7.3	-29.0	-6.8	25.0	-0.2
				Earthquake X Mode 2	46.6	17.9	13.1	13.4	10.4	-0.1	46.6	-14.2	-11.8	13.4	10.4	-0.1
				Earthquake X Mode 3	-9.7	-0.4	-9.2	-0.3	-7.5	0.0	-9.7	0.2	8.8	-0.3	-7.5	0.0
				Earthquake X Mode 4	-1.3	-0.4	2.1	-0.5	2.1	-0.0	-1.3	0.9	-2.9	-0.5	2.1	-0.0
				Earthquake X Mode 5	-3.6	1.0	1.3	1.3	1.3	-0.0	-3.6	-2.1	-1.8	1.3	1.3	-0.0
				Earthquake X Mode 6	0.5	-0.0	0.3	-0.0	-0.4	0.0	0.5	0.0	0.5	-0.0	-0.4	0.0
				Earthquake X Mode 7	-0.2	0.2	-0.5	0.0	-0.2	0.0	-0.2	0.1	-0.1	0.0	-0.2	0.0
				Earthquake X Mode 8	0.2	0.1	0.3	0.0	0.1	-0.0	0.2	0.1	-0.0	0.0	0.1	-0.0
				Earthquake X Mode 9	0.3	0.4	0.1	0.1	-0.0	-0.0	0.3	0.3	0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	6.6	-4.0	14.1	-3.1	11.4	-0.1	6.6	3.3	-13.2	-3.1	11.4	-0.1
				Earthquake Y Mode 2	14.4	5.5	4.0	4.1	3.2	-0.0	14.4	-4.4	-3.6	4.1	3.2	-0.0
				Earthquake Y Mode 3	-59.6	-2.4	-56.9	-1.6	-46.4	0.1	-59.6	1.5	54.4	-1.6	-46.4	0.1
				Earthquake Y Mode 4	-0.3	-0.1	0.4	-0.1	0.4	-0.0	-0.3	0.2	-0.6	-0.1	0.4	-0.0
				Earthquake Y Mode 5	-0.7	0.2	0.2	0.2	0.2	-0.0	-0.7	-0.4	-0.3	0.2	0.2	-0.0
				Earthquake Y Mode 6	3.9	-0.2	-2.8	-0.2	-2.9	0.0	3.9	0.3	4.2	-0.2	-2.9	0.0
				Earthquake Y Mode 7	-0.1	0.1	-0.1	0.0	-0.1	0.0	-0.1	0.0	-0.0	0.0	-0.1	0.0
				Earthquake Y Mode 8	0.4	0.2	0.7	0.0	0.3	-0.0	0.4	0.2	-0.0	0.0	0.3	-0.0
				Earthquake Y Mode 9	0.1	0.2	0.0	0.0	-0.0	-0.0	0.1	0.1	0.0	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.40	Self weight	722.0	13.3	-18.6	14.9	-20.1	0.0	0.0	707.3	-22.4	29.6	14.9	-20.1	0.0
				Dead load	177.2	2.1	-5.2	2.3	-5.6	0.0	177.2	-3.5	8.2	2.3	-5.6	0.0
				Live load	268.1	8.3	-9.9	9.2	-10.6	0.0	268.1	-13.8	15.6	9.2	-10.6	0.0
				Wind +X ecc.+	-4.1	-2.5	-0.1	-1.3	-0.0	0.0	-4.1	0.7	0.0	-1.3	-0.0	0.0
				Wind +X ecc.-	-2.3	-2.8	1.9	-1.5	1.3	-0.0	-2.3	0.8	-1.2	-1.5	1.3	-0.0
				Wind -X ecc.+	4.1	2.5	0.1	1.3	0.0	-0.0	4.1	-0.7	-0.0	1.3	0.0	-0.0
				Wind -X ecc.-	2.3	2.8	-1.9	1.5	-1.3	0.0	2.3	-0.8	1.2	-1.5	-1.3	0.0
				Wind +Y ecc.+	-3.6	-0.6	-3.3	-0.3	-2.3	-0.0	-3.6	0.2	2.3	-0.3	-2.3	-0.0
				Wind +Y ecc.-	-11.9	0.7	-12.3	0.4	-8.4	0.0	-11.9	-0.2	8.0	0.4	-8.4	0.0
				Wind -Y ecc.+	3.6	0.6	3.3	0.3	2.3	0.0	3.6	-0.2	-2.3	0.3	2.3	0.0
				Wind -Y ecc.-	11.9	-0.7	12.3	-0.4	8.4	-0.0	11.9	0.2	-8.0	-0.4	8.4	-0.0
				Earthquake X Mode 1	19.6	-11.2	29.0	-5.8	19.5	-0.1	19.6	2.8	-17.7	-5.8	19.5	-0.1
				Earthquake X Mode 2	60.1	21.6	11.0	11.2	7.2	-0.1	60.1	-5.3	-6.3	11.2	7.2	-0.1
				Earthquake X Mode 3	-13.0	-0.2	-9.6	-0.1	-6.5	0.0	-13.0	0.0	6.0	-0.1	-6.5	0.0
				Earthquake X Mode 4	-0.7	-1.4	4.3	-0.9	3.0	-0.0	-0.7	0.6	-3.0	-0.9	3.0	-0.0
				Earthquake X Mode 5	-1.9	3.1	2.4	1.8	1.7	-0.0	-1.9	-1.3	-1.7	1.8	1.7	-0.0
				Earthquake X Mode 6	0.2	-0.0	-0.8	-0.0	-0.6	0.0	0.2	0.0	0.6	-0.0	-0.6	0.0
				Earthquake X Mode 7	-0.1	-0.4	1.5	-0.3	1.1	-0.0	-0.1	0.3	-1.2	-0.3	1.1	-0.0
				Earthquake X Mode 8	0.0	-0.2	-0.6	-0.1	-0.5	0.0	0.0	0.1	0.5	-0.1	-0.5	0.0
				Earthquake X Mode 9	0.0	-1.0	-0.4	-0.7	-0.3	0.0	0.0	0.6	0.3	-0.7	-0.3	0.0
				Earthquake Y Mode 1	8.9	-5.1	13.1	-2.6	8.8	-0.0	8.9	1.3	-8.0	-2.6	8.8	-0.0
				Earthquake Y Mode 2	18.6	6.7	3.4	3.5	2.2	-0.0	18.6					



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C8	techo	40x30	12.00/14.40	Self weight	201.1	-0.2	-7.7	-0.3	-4.4	0.0	194.0	0.5	2.8	-0.3	-4.4	0.0
				Dead load	89.9	-0.7	4.2	-0.5	4.5	-0.0	89.9	0.6	-6.5	-0.5	4.5	-0.0
				Live load	37.5	-0.0	-4.7	-0.0	-2.6	0.0	37.5	0.0	1.5	-0.0	-2.6	0.0
				Wind +X ecc.+	0.1	-0.7	0.0	-0.5	0.0	0.0	0.1	0.4	0.0	-0.5	0.0	0.0
				Wind +X ecc.-	0.1	-0.8	0.1	-0.5	0.1	-0.0	0.1	0.4	-0.1	-0.5	0.1	-0.0
				Wind -X ecc.+	-0.1	0.7	-0.0	0.5	-0.0	-0.0	-0.1	-0.4	-0.0	0.5	-0.0	-0.0
				Wind -X ecc.-	-0.1	0.8	-0.1	0.5	-0.1	0.0	-0.1	-0.4	0.1	0.5	-0.1	0.0
				Wind +Y ecc.+	0.1	-0.2	-0.1	-0.1	-0.1	-0.0	0.1	0.1	0.1	-0.1	-0.1	-0.0
				Wind +Y ecc.-	0.1	0.1	-0.5	0.1	-0.4	0.0	0.1	-0.1	0.4	0.1	-0.4	0.0
				Wind -Y ecc.+	-0.1	0.2	0.1	0.1	0.1	0.0	-0.1	-0.1	-0.1	0.1	0.1	0.0
				Wind -Y ecc.-	-0.1	-0.1	0.5	-0.1	0.4	-0.0	-0.1	0.1	-0.4	-0.1	0.4	-0.0
				Earthquake X Mode 1	0.6	-4.2	1.9	-2.7	1.3	-0.0	0.6	2.1	-1.3	-2.7	1.3	-0.0
				Earthquake X Mode 2	-0.8	9.0	0.8	5.6	0.6	-0.0	-0.8	-4.5	-0.5	5.6	0.6	-0.0
				Earthquake X Mode 3	0.1	-0.2	-0.7	-0.1	-0.5	0.0	0.1	0.1	0.4	-0.1	-0.5	0.0
				Earthquake X Mode 4	-0.3	0.9	-0.6	0.6	-0.4	0.0	-0.3	-0.4	0.4	0.6	-0.4	0.0
				Earthquake X Mode 5	0.6	-2.0	-0.3	-1.2	-0.2	0.0	0.6	1.0	0.2	-1.2	-0.2	0.0
				Earthquake X Mode 6	-0.0	0.0	0.1	0.0	0.1	-0.0	-0.0	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 7	0.1	-0.2	0.2	-0.1	0.1	-0.0	0.1	0.1	-0.1	-0.1	0.1	-0.0
				Earthquake X Mode 8	0.0	-0.1	-0.1	-0.1	-0.1	-0.0	0.0	0.0	0.1	-0.1	-0.1	-0.0
				Earthquake X Mode 9	0.2	-0.5	-0.1	-0.3	-0.0	0.0	0.2	0.2	0.0	-0.3	-0.0	0.0
				Earthquake Y Mode 1	0.3	-1.9	0.9	-1.2	0.6	-0.0	0.3	1.0	-0.6	-1.2	0.6	-0.0
				Earthquake Y Mode 2	-0.2	2.8	0.2	1.7	0.2	-0.0	-0.2	-1.4	-0.2	1.7	0.2	-0.0
				Earthquake Y Mode 3	0.8	-1.2	-4.0	-0.7	-2.8	0.0	0.8	0.5	2.7	-0.7	-2.8	0.0
				Earthquake Y Mode 4	-0.1	0.2	-0.1	0.1	-0.1	0.0	-0.1	-0.1	0.1	0.1	-0.1	0.0
				Earthquake Y Mode 5	0.1	-0.4	-0.1	-0.2	-0.0	0.0	0.1	0.2	0.0	-0.2	-0.0	0.0
				Earthquake Y Mode 6	-0.1	0.3	1.0	0.2	0.7	-0.0	-0.1	-0.1	-0.6	0.2	0.7	-0.0
				Earthquake Y Mode 7	0.0	-0.1	0.1	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0
				Earthquake Y Mode 8	0.1	-0.3	-0.3	-0.2	-0.2	-0.0	0.1	0.1	0.1	-0.2	-0.2	-0.0
				Earthquake Y Mode 9	0.1	-0.2	-0.0	-0.1	-0.0	0.0	0.1	0.1	0.0	-0.1	-0.0	0.0
	Floor 4	40x30	9.00/11.50	Self weight	356.9	0.2	-11.1	0.2	-9.0	0.0	349.6	-0.4	11.4	0.2	-9.0	0.0
				Dead load	106.6	-0.3	-3.0	-0.2	-2.8	-0.0	106.6	0.2	3.9	-0.2	-2.8	-0.0
				Live load	134.4	-0.1	-7.5	-0.1	-6.1	0.0	134.4	0.1	7.8	-0.1	-6.1	0.0
				Wind +X ecc.+	0.1	-1.3	0.0	-1.1	0.0	0.0	0.1	1.3	-0.0	-1.1	0.0	0.0
				Wind +X ecc.-	0.2	-1.4	0.2	-1.2	0.1	-0.0	0.2	1.5	-0.2	-1.2	0.1	-0.0
				Wind -X ecc.+	-0.1	1.3	-0.0	1.1	-0.0	-0.0	-0.1	-1.3	0.0	1.1	-0.0	-0.0
				Wind -X ecc.-	-0.2	1.4	-0.2	1.2	-0.1	0.0	-0.2	-1.5	0.2	1.2	-0.1	0.0
				Wind +Y ecc.+	0.1	-0.4	-0.3	-0.3	-0.2	-0.0	0.1	0.4	0.3	-0.3	-0.2	-0.0
				Wind +Y ecc.-	-0.1	0.2	-0.9	0.2	-0.8	0.0	-0.1	-0.2	1.1	0.2	-0.8	0.0
				Wind -Y ecc.+	-0.1	0.4	0.3	0.3	0.2	0.0	-0.1	-0.4	-0.3	0.3	0.2	0.0
				Wind -Y ecc.-	0.1	-0.2	0.9	-0.2	0.8	-0.0	0.1	0.2	-1.1	-0.2	0.8	-0.0
				Earthquake X Mode 1	1.8	-7.4	3.0	-6.0	2.5	-0.0	1.8	7.6	-3.3	-6.0	2.5	-0.0
				Earthquake X Mode 2	-1.6	15.1	1.0	12.3	0.9	-0.0	-1.6	-15.6	-1.1	12.3	0.9	-0.0
				Earthquake X Mode 3	-0.1	-0.3	-1.1	-0.3	-0.9	0.0	-0.1	0.3	1.2	-0.3	-0.9	0.0
				Earthquake X Mode 4	-0.6	1.0	-0.7	0.8	-0.5	0.0	-0.6	-1.0	0.6	0.8	-0.5	0.0
				Earthquake X Mode 5	0.9	-2.2	-0.3	-1.7	-0.2	0.0	0.9	2.1	0.2	-1.7	-0.2	0.0
				Earthquake X Mode 6	0.0	0.0	0.1	0.0	0.1	-0.0	0.0	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 7	0.1	0.0	0.0	0.0	-0.0	0.0	0.1	-0.0	0.1	0.0	-0.0	0.0
				Earthquake X Mode 8	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0
				Earthquake X Mode 9	0.3	0.1	0.0	0.1	0.0	-0.0	0.3	-0.1	-0.0	0.1	0.0	-0.0
				Earthquake Y Mode 1	0.8	-3.3	1.4	-2.7	1.2	-0.0	0.8	3.5	-1.5	-2.7	1.2	-0.0
				Earthquake Y Mode 2	-0.5	4.7	0.3	3.8	0.3	-0.0	-0.5	-4.8	-0.4	3.8	0.3	-0.0
				Earthquake Y Mode 3	-0.5	-2.0	-6.5	-1.6	-5.5	0.0	-0.5	2.1	7.3	-1.6	-5.5	0.0
				Earthquake Y Mode 4	-0.1	0.2	-0.1	0.2	-0.1	0.0	-0.1	-0.2	0.1	0.2	-0.1	0.0
				Earthquake Y Mode 5	0.2	-0.4	-0.1	-0.3	-0.0	0.0	0.2	0.4	0.0	-0.3	-0.0	0.0
				Earthquake Y Mode 6	0.0	0.3	1.2	0.2	0.9	-0.0	0.0	-0.3	-1.0	0.2	0.9	-0.0
				Earthquake Y Mode 7	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0
				Earthquake Y Mode 8	0.1	0.0	-0.0	0.0	0.0	0.0	0.1	-0.1	-0.1	0.0	0.0	0.0
				Earthquake Y Mode 9	0.1	0.0	0.0	0.0	-0.0	-0.0	0.1	-0.0	-0.0	0.0	0.0	-0.0
Floor 3	40x30	6.00/8.50	Self weight	518.6	-0.3	-10.3	-0.2	-8.3	0.0	511.3	0.3	10.5	-0.2	-8.3	0.0	
				Dead load	126.4	-0.4	-1.8	-0.3	-1.3	-0.0	126.4	0.4	1.6	-0.3	-1.3	-0.0
				Live load	232.2	-0.3	-6.9	-0.2	-5.5	0.0	232.2	0.3	6.9	-0.2	-5.5	0.0
				Wind +X ecc.+	0.3	-1.7	0.0	-1.3	0.0	0.0	0.3	1.7	-0.0	-1.3	0.0	0.0
				Wind +X ecc.-	0.4	-1.8	0.2	-1.5	0.2	-0.0	0.4	1.8	-0.2	-1.5	0.2	-0.0
				Wind -X ecc.+	-0.3	1.7	-0.0	1.3	-0.0	-0.0	-0.3	-1.7	0.0	1.3	-0.0	-0.0
				Wind -X ecc.-	-0.4	1.8	-0.2	1.5	-0.2	0.0	-0.4	-1.8	0.2	1.5	-0.2	0.0
				Wind +Y ecc.+	0.1	-0.5	-0.4	-0.4	-0.3	-0.0	0.1	0.5	0.5	-0.4	-0.3	-0.0
				Wind +Y ecc.-	-0.4	0.3	-1.3	0.2	-1.1	0.0	-0.4	-0.3	1.5	0.2	-1.1	0.0
				Wind -Y ecc.+	-0.1	0.5	0.4	0.4	0.3	0.0	-0.1	-0.5	-0.5	0.4	0.3	0.0
				Wind -Y ecc.-	0.4	-0.3	1.3	-0.2	1.1	-0.0	0.4	0.3	-1.5	-0.2	1.1	-0.0
				Earthquake X Mode 1	3.7	-8.9	3.8	-7.1	3.1	-0.0	3.7	8.9	-4.0	-7.1	3.1	-0.0
				Earthquake X Mode 2	-3.3	17.8	1.2	14.3	1.0	-0.0	-3.3	-17.9	-1.3	14.3	1.0	-0.0
				Earthquake X Mode 3	-0.3	-0.4	-1.4	-0.3	-1.1	0.0	-0.3	0.4	1.4	-0.3	-1.1	0.0
				Earthquake X Mode 4	-0.7	0.3	-0.3	0.2	-0.1	0.0	-0.7	-0.2	0.1	0.2	-0.1	0.0
				Earthquake X Mode 5	1.0	-0.5	-0.1	-0.3	-0.0	0.0	1.0	0.4	0.0	-0.3	-0.0	0.0
				Earthquake X Mode 6	0.0	0.0	0.1	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0
				Earthquake X Mode 7	0.0	0.2	-0.2	0.2	-0.2	0.0	0.0	-0.2	0.2	0.2	-0.2	0.0
				Earthquake X Mode 8	0.0	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.1	0.1	0.1	0.0
				Earthquake X Mode 9	0.1	0.6	0.0	0.5	0.0	-0.0	0.1	-0.6	-0.0	0.5	0.0	-0.0
				Earthquake Y Mode 1	1.7	-4.0	1.7	-3.2	1.4	-0.0	1.7	4.1	-1.8	-3.2	1.4	-0.0
				Earthquake Y Mode 2	-1.0	5.5	0.4	4.4	0.3	-0.0	-1.0	-5.5	-0.4	4.4	0.3	-0.0
				Earthquake Y Mode 3	-2.2	-2.2	-8.3	-1.7	-6.8	0.0	-2.2	2.2	8.8	-1.7	-6.8	0.0
				Earthquake Y Mode 4	-0.1	0.1	-0.0	0.0	-0.0	0.0	-0.1	-0.0	0.0	0.0	-0.	



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	40x30	3.00/5.50	Self weight	685.5	-1.0	-11.2	-0.7	-8.7	0.0	678.2	0.7	10.7	-0.7	-8.7	0.0
				Dead load	147.6	-0.4	-2.1	-0.3	-1.7	0.0	147.6	0.4	2.1	-0.3	-1.7	0.0
				Live load	333.1	-0.7	-7.5	-0.5	-5.9	0.0	333.1	0.6	7.2	-0.5	-5.9	0.0
				Wind +X ecc.+	0.6	-1.9	0.0	-1.5	0.0	0.0	0.6	1.8	-0.0	-1.5	0.0	0.0
				Wind +X ecc.-	0.8	-2.0	0.3	-1.6	0.2	-0.0	0.8	2.0	-0.3	-1.6	0.2	-0.0
				Wind -X ecc.+	-0.6	1.9	-0.0	1.5	-0.0	-0.0	-0.6	-1.8	0.0	1.5	-0.0	-0.0
				Wind -X ecc.-	-0.8	2.0	-0.3	1.6	-0.2	0.0	-0.8	-2.0	0.3	1.6	-0.2	0.0
				Wind +Y ecc.+	0.0	-0.5	-0.6	-0.4	-0.5	0.0	0.0	0.5	0.6	-0.4	-0.5	0.0
				Wind +Y ecc.-	-0.9	0.4	-1.7	0.3	-1.4	0.0	-0.9	-0.4	1.7	0.3	-1.4	0.0
				Wind -Y ecc.+	-0.0	0.5	0.6	0.4	0.5	0.0	-0.0	-0.5	-0.6	0.4	0.5	0.0
				Wind -Y ecc.-	0.9	-0.4	1.7	-0.3	1.4	-0.0	0.9	0.4	-1.7	-0.3	1.4	-0.0
				Earthquake X Mode 1	6.0	-9.2	4.4	-7.3	3.4	-0.0	6.0	9.0	-4.1	-7.3	3.4	-0.0
				Earthquake X Mode 2	-6.0	18.2	1.3	14.4	1.0	-0.0	-6.0	-17.8	-1.2	14.4	1.0	-0.0
				Earthquake X Mode 3	-0.6	-0.3	-1.6	-0.2	-1.2	0.0	-0.6	0.3	1.5	-0.2	-1.2	0.0
				Earthquake X Mode 4	-0.6	-0.6	0.3	-0.5	0.3	-0.0	-0.6	0.6	-0.4	-0.5	0.3	-0.0
				Earthquake X Mode 5	0.7	1.3	0.2	1.1	0.2	-0.0	0.7	-1.4	-0.2	1.1	0.2	-0.0
				Earthquake X Mode 6	0.0	-0.0	0.1	-0.0	-0.1	0.0	0.0	0.0	0.1	-0.0	-0.1	0.0
				Earthquake X Mode 7	-0.0	0.0	-0.1	0.0	-0.0	0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0
				Earthquake X Mode 8	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake X Mode 9	0.0	0.1	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0
				Earthquake Y Mode 1	2.7	-4.2	2.0	-3.3	1.5	-0.0	2.7	4.1	-1.9	-3.3	1.5	-0.0
				Earthquake Y Mode 2	-1.8	5.6	0.4	4.4	0.3	-0.0	-1.8	-5.5	-0.4	4.4	0.3	-0.0
				Earthquake Y Mode 3	-3.9	-1.9	-9.7	-1.5	-7.6	0.0	-3.9	1.8	9.3	-1.5	-7.6	0.0
				Earthquake Y Mode 4	-0.1	-0.1	0.1	-0.1	0.1	-0.0	-0.1	0.1	-0.1	-0.1	0.1	-0.0
				Earthquake Y Mode 5	0.1	0.2	0.0	0.2	0.0	-0.0	0.1	-0.2	-0.0	0.2	0.0	-0.0
				Earthquake Y Mode 6	0.2	-0.2	-0.5	-0.2	-0.5	0.0	0.2	0.2	0.7	-0.2	-0.5	0.0
				Earthquake Y Mode 7	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0
				Earthquake Y Mode 8	0.1	0.0	0.1	0.0	0.0	-0.0	0.1	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake Y Mode 9	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0
	Floor 1	40x30	0.00/2.50	Self weight	863.2	-0.6	-5.3	-0.7	-5.6	0.0	855.8	1.0	8.6	-0.7	-5.6	0.0
				Dead load	171.1	-0.2	-1.0	-0.2	-1.1	0.0	171.1	0.3	1.6	-0.2	-1.1	0.0
				Live load	440.0	-0.4	-3.6	-0.5	-3.8	0.0	440.0	0.7	5.8	-0.5	-3.8	0.0
				Wind +X ecc.+	1.0	-1.3	-0.0	-1.0	0.0	0.0	1.0	1.2	-0.0	-1.0	0.0	0.0
				Wind +X ecc.-	1.2	-1.5	0.3	-1.1	0.2	-0.0	1.2	1.3	-0.2	-1.1	0.2	-0.0
				Wind -X ecc.+	-1.0	1.3	0.0	1.0	-0.0	-0.0	-1.0	-1.2	0.0	1.0	-0.0	-0.0
				Wind -X ecc.-	-1.2	1.5	-0.3	1.1	-0.2	0.0	-1.2	-1.3	0.2	1.1	-0.2	0.0
				Wind +Y ecc.+	-0.0	-0.3	-0.7	-0.2	-0.5	-0.0	-0.0	0.3	0.5	-0.2	-0.5	-0.0
				Wind +Y ecc.-	-1.3	0.4	-2.0	0.3	-1.4	0.0	-1.3	-0.3	1.4	0.3	-1.4	0.0
				Wind -Y ecc.+	0.0	0.3	0.7	0.2	0.5	0.0	0.0	-0.3	-0.5	0.2	0.5	0.0
				Wind -Y ecc.-	1.3	-0.4	2.0	-0.3	1.4	-0.0	1.3	0.3	-1.4	-0.3	1.4	-0.0
				Earthquake X Mode 1	8.2	-6.1	4.0	-4.6	2.7	-0.0	8.2	5.4	-2.7	-4.6	2.7	-0.0
				Earthquake X Mode 2	-8.9	11.8	1.2	8.9	0.7	-0.0	-8.9	-10.5	-0.7	8.9	0.7	-0.0
				Earthquake X Mode 3	-0.9	-0.1	-1.6	-0.1	-1.1	0.0	-0.9	0.1	1.1	-0.1	-1.1	0.0
				Earthquake X Mode 4	-0.3	-0.7	0.6	-0.6	0.4	-0.0	-0.3	0.7	-0.5	-0.6	0.4	-0.0
				Earthquake X Mode 5	0.2	1.6	0.3	1.2	0.2	-0.0	0.2	-1.4	-0.2	1.2	0.2	-0.0
				Earthquake X Mode 6	0.0	-0.0	-0.1	-0.0	-0.1	0.0	0.0	0.0	0.1	-0.0	-0.1	0.0
				Earthquake X Mode 7	0.0	-0.2	0.2	-0.1	0.2	-0.0	0.0	0.2	-0.2	-0.1	0.2	-0.0
				Earthquake X Mode 8	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	-0.1	-0.1	0.0
				Earthquake X Mode 9	0.1	-0.4	-0.0	-0.3	-0.0	0.0	0.1	0.4	0.0	-0.3	-0.0	0.0
				Earthquake Y Mode 1	3.7	-2.8	1.8	-2.1	1.2	-0.0	3.7	2.5	-1.2	-2.1	1.2	-0.0
				Earthquake Y Mode 2	-2.7	3.6	0.4	2.8	0.2	-0.0	-2.7	-3.3	-0.2	2.8	0.2	-0.0
				Earthquake Y Mode 3	-5.4	-0.8	-9.8	-0.6	-6.5	0.0	-5.4	0.7	6.5	-0.6	-6.5	0.0
				Earthquake Y Mode 4	-0.1	-0.1	0.1	-0.1	0.1	-0.0	-0.1	0.1	-0.1	-0.1	0.1	-0.0
				Earthquake Y Mode 5	0.0	0.3	0.1	0.2	0.0	-0.0	0.0	-0.3	-0.0	0.2	0.0	-0.0
				Earthquake Y Mode 6	0.1	-0.2	-1.2	-0.1	-0.8	0.0	0.1	0.1	0.9	-0.1	-0.8	0.0
				Earthquake Y Mode 7	0.0	-0.1	0.1	-0.0	0.0	-0.0	0.0	0.1	-0.1	-0.0	0.0	-0.0
				Earthquake Y Mode 8	0.1	-0.2	-0.3	-0.2	-0.2	0.0	0.1	0.2	0.2	-0.2	-0.2	0.0
				Earthquake Y Mode 9	0.0	-0.2	-0.0	-0.1	-0.0	0.0	0.0	0.2	0.0	-0.1	-0.0	0.0
C9	techo	50x50	12.00/14.40	Self weight	241.0	-18.4	-67.0	-12.6	-46.2	0.0	226.3	11.8	43.8	-12.6	-46.2	0.0
				Dead load	57.4	-5.0	-0.2	-3.6	2.1	-0.0	57.4	3.7	-5.2	-3.6	2.1	-0.0
				Live load	49.8	-8.7	-29.3	-5.7	-17.4	0.0	49.8	5.0	12.4	-5.7	-17.4	0.0
				Wind +X ecc.+	-0.8	-1.4	-0.0	-1.0	-0.0	0.0	-0.8	1.0	0.0	-1.0	-0.0	0.0
				Wind +X ecc.-	-0.7	-1.5	0.3	-1.1	0.2	-0.0	-0.7	1.1	-0.2	-1.1	0.2	-0.0
				Wind -X ecc.+	0.8	1.4	0.0	1.0	0.0	-0.0	0.8	-1.0	-0.0	1.0	0.0	-0.0
				Wind -X ecc.-	0.7	1.5	-0.3	1.1	-0.2	0.0	0.7	-1.1	0.2	1.1	-0.2	0.0
				Wind +Y ecc.+	-1.2	-0.9	-0.9	-0.6	-0.7	-0.0	-1.2	0.6	0.7	-0.6	-0.7	-0.0
				Wind +Y ecc.-	-1.5	-0.6	-2.2	-0.4	-1.6	0.0	-1.5	0.4	1.6	-0.4	-1.6	0.0
				Wind -Y ecc.+	1.2	0.9	0.9	0.6	0.7	0.0	1.2	-0.6	-0.7	0.6	0.7	0.0
				Wind -Y ecc.-	1.5	0.6	2.2	0.4	1.6	-0.0	1.5	-0.4	-1.6	0.4	1.6	-0.0
				Earthquake X Mode 1	-2.4	-7.2	6.1	-5.2	4.3	-0.1	-2.4	5.2	-4.2	-5.2	4.3	-0.1
				Earthquake X Mode 2	10.0	17.7	2.5	12.5	1.6	-0.1	10.0	-12.4	-1.3	12.5	1.6	-0.1
				Earthquake X Mode 3	-1.9	-1.2	-2.9	-0.8	-2.0	0.0	-1.9	0.8	2.0	-0.8	-2.0	0.0
				Earthquake X Mode 4	0.8	1.9	-2.2	1.3	-1.5	0.0	0.8	-1.1	1.3	1.3	-1.5	0.0
				Earthquake X Mode 5	-3.1	-4.6	-1.2	-3.1	-0.7	0.0	-3.1	2.8	0.6	-3.1	-0.7	0.0
				Earthquake X Mode 6	0.2	0.1	0.6	0.1	0.4	-0.0	0.2	-0.1	-0.3	0.1	0.4	-0.0
				Earthquake X Mode 7	-0.2	-0.6	1.0	-0.3	0.6	-0.0	-0.2	0.3	-0.5	-0.3	0.6	-0.0
				Earthquake X Mode 8	-0.3	-0.3	-0.6	-0.2	-0.4	-0.0	-0.3	0.2	0.3	-0.2	-0.4	-0.0
				Earthquake X Mode 9	-0.9	-1.4	-0.1	-0.9	-0.1	0.0	-0.9	0.7	0.0	-0.9	-0.1	0.0
				Earthquake Y Mode 1	-1.1	-3.3	2.8	-2.4	1.9	-0.0	-1.1	2.4	-1.9	-2.4	1.9	-0.0
				Earthquake Y Mode 2	3.1	5.5	0.8	3.9	0.5	-0.0	3.1	-3.8	-0.4	3.9	0.5	-0.0
				Earthquake Y Mode 3	-11.9	-7.1	-17.7	-4.9	-12.4	0.0	-11.9	4.8	12.2	-4.9	-12.4	0.0
				Earthquake Y Mode 4	0.2	0.4	-0.4	0.2	-0.3	0.0	0.2	-0.2				



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 4	50x50	9.00/11.40	Self weight	456.3	-17.5	-63.5	-14.9	-52.7	0.0	441.6	18.2	62.8	-14.9	-52.7	0.0
				Dead load	86.0	-3.3	-10.3	-2.7	-9.3	-0.0	86.0	3.3	12.0	-2.7	-9.3	-0.0
				Live load	164.0	-9.3	-40.8	-7.9	-34.8	0.0	164.0	9.7	42.7	-7.9	-34.8	0.0
				Wind +X ecc.+	-1.8	-2.2	-0.1	-1.9	-0.1	0.0	-1.8	2.5	0.1	-1.9	-0.1	0.0
				Wind +X ecc.-	-1.6	-2.3	0.5	-2.1	0.4	-0.0	-1.6	2.7	-0.6	-2.1	0.4	-0.0
				Wind -X ecc.+	1.8	2.2	0.1	1.9	0.1	-0.0	1.8	-2.5	-0.1	1.9	0.1	-0.0
				Wind -X ecc.-	1.6	2.3	-0.5	2.1	-0.4	0.0	1.6	-2.7	0.6	2.1	-0.4	0.0
				Wind +Y ecc.+	-2.7	-1.1	-2.0	-0.9	-1.9	-0.0	-2.7	1.2	2.5	-0.9	-1.9	-0.0
				Wind +Y ecc.-	-3.6	-0.4	-4.5	-0.3	-4.1	0.0	-3.6	0.3	5.4	-0.3	-4.1	0.0
				Wind -Y ecc.+	2.7	1.1	2.0	0.9	1.9	0.0	2.7	-1.2	-2.5	0.9	1.9	0.0
				Wind -Y ecc.-	3.6	0.4	4.5	0.3	4.1	-0.0	3.6	-0.3	-5.4	0.3	4.1	-0.0
				Earthquake X Mode 1	-4.3	-11.7	10.3	-10.3	9.2	-0.1	-4.3	13.1	-11.8	-10.3	9.2	-0.1
				Earthquake X Mode 2	23.4	25.9	3.4	22.7	3.0	-0.1	23.4	-28.6	-3.7	22.7	3.0	-0.1
				Earthquake X Mode 3	-4.6	-1.2	-5.1	-1.1	-4.6	0.0	-4.6	1.3	5.9	-1.1	-4.6	0.0
				Earthquake X Mode 4	1.1	2.0	-2.6	1.5	-2.0	0.0	1.1	-1.6	2.1	1.5	-2.0	0.0
				Earthquake X Mode 5	-6.0	-4.6	-1.2	-3.4	-0.9	0.0	-6.0	3.7	1.0	-3.4	-0.9	0.0
				Earthquake X Mode 6	0.5	0.1	0.7	0.1	0.6	-0.0	0.5	-0.1	-0.6	0.1	0.6	-0.0
				Earthquake X Mode 7	-0.2	-0.0	0.1	0.1	-0.1	0.0	-0.2	-0.2	0.3	0.1	-0.1	0.0
				Earthquake X Mode 8	-0.4	-0.0	-0.1	0.0	0.0	0.0	-0.4	-0.1	-0.1	0.0	0.0	0.0
				Earthquake X Mode 9	-1.1	-0.0	0.1	0.2	0.1	-0.0	-1.1	-0.4	-0.1	0.2	0.1	-0.0
				Earthquake Y Mode 1	-1.9	-5.3	4.7	-4.7	4.2	-0.1	-1.9	5.9	-5.4	-4.7	4.2	-0.1
				Earthquake Y Mode 2	7.2	8.0	1.1	7.0	0.9	-0.0	7.2	-8.8	-1.1	7.0	0.9	-0.0
				Earthquake Y Mode 3	-28.2	-7.6	-31.7	-6.5	-28.4	0.1	-28.2	7.9	36.4	-6.5	-28.4	0.1
				Earthquake Y Mode 4	0.2	0.4	-0.5	0.3	-0.4	0.0	0.2	-0.3	0.4	0.3	-0.4	0.0
				Earthquake Y Mode 5	-1.1	-0.8	-0.2	-0.6	-0.2	0.0	-1.1	0.7	0.2	-0.6	-0.2	0.0
				Earthquake Y Mode 6	4.2	0.9	6.2	0.7	4.7	-0.0	4.2	-0.8	-5.2	0.7	4.7	-0.0
				Earthquake Y Mode 7	-0.1	-0.0	0.0	0.0	-0.0	0.0	-0.1	-0.1	0.1	0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.9	-0.0	-0.3	0.1	0.0	0.0	-0.9	-0.2	-0.4	0.1	0.0	0.0
				Earthquake Y Mode 9	-0.4	-0.0	0.0	0.1	0.0	-0.0	-0.4	-0.2	-0.0	0.1	0.0	-0.0
	Floor 3	50x50	6.00/8.40	Self weight	672.7	-14.9	-62.1	-12.8	-52.4	0.0	658.0	15.8	63.7	-12.8	-52.4	0.0
				Dead load	113.1	-2.8	-8.2	-2.4	-6.7	-0.0	113.1	3.0	7.9	-2.4	-6.7	-0.0
				Live load	277.4	-8.0	-37.3	-6.9	-31.2	0.0	277.4	8.5	37.7	-6.9	-31.2	0.0
				Wind +X ecc.+	-3.3	-2.9	-0.1	-2.5	-0.1	0.0	-3.3	3.1	0.1	-2.5	-0.1	0.0
				Wind +X ecc.-	-3.0	-3.2	0.7	-2.7	0.6	-0.0	-3.0	3.4	-0.8	-2.7	0.6	-0.0
				Wind -X ecc.+	3.3	2.9	0.1	2.5	0.1	-0.0	3.3	-3.1	-0.1	2.5	0.1	-0.0
				Wind -X ecc.-	3.0	3.2	-0.7	2.7	-0.6	0.0	3.0	-3.4	0.8	2.7	-0.6	0.0
				Wind +Y ecc.+	-4.4	-1.2	-2.9	-1.1	-2.6	-0.0	-4.4	1.3	3.3	-1.1	-2.6	-0.0
				Wind +Y ecc.-	-5.9	-0.1	-6.5	-0.1	-5.7	0.0	-5.9	0.1	7.3	-0.1	-5.7	0.0
				Wind -Y ecc.+	4.4	1.2	2.9	1.1	2.6	0.0	4.4	-1.3	-3.3	1.1	2.6	0.0
				Wind -Y ecc.-	5.9	0.1	6.5	0.1	5.7	-0.0	5.9	-0.1	-7.3	0.1	5.7	-0.0
				Earthquake X Mode 1	-7.6	-15.2	13.5	-12.9	11.6	-0.2	-7.6	15.8	-14.3	-12.9	11.6	-0.2
				Earthquake X Mode 2	41.1	32.2	3.7	27.2	3.1	-0.1	41.1	-33.1	-3.7	27.2	3.1	-0.1
				Earthquake X Mode 3	-7.6	-1.2	-6.7	-1.0	-5.7	0.0	-7.6	1.2	7.1	-1.0	-5.7	0.0
				Earthquake X Mode 4	1.1	0.7	-1.1	0.3	-0.5	0.0	1.1	-0.1	0.2	0.3	-0.5	0.0
				Earthquake X Mode 5	-7.2	-1.5	-0.4	-0.7	-0.2	0.0	-7.2	0.1	0.0	-0.7	-0.2	0.0
				Earthquake X Mode 6	0.7	0.0	0.3	0.0	0.2	-0.0	0.7	-0.0	-0.1	0.0	0.2	-0.0
				Earthquake X Mode 7	-0.1	0.6	-1.0	0.4	-0.8	0.0	-0.1	-0.5	1.0	0.4	-0.8	0.0
				Earthquake X Mode 8	-0.2	0.3	0.7	0.2	0.5	0.0	-0.2	-0.2	-0.6	0.2	0.5	0.0
				Earthquake X Mode 9	-0.4	1.4	0.1	1.1	0.1	-0.0	-0.4	-1.3	-0.1	1.1	0.1	-0.0
				Earthquake Y Mode 1	-3.4	-6.9	6.1	-5.9	5.3	-0.1	-3.4	7.2	-6.5	-5.9	5.3	-0.1
				Earthquake Y Mode 2	12.7	9.9	1.1	8.4	1.0	-0.0	12.7	-10.2	-1.2	8.4	1.0	-0.0
				Earthquake Y Mode 3	-46.7	-7.4	-41.0	-6.3	-35.2	0.1	-46.7	7.6	43.6	-6.3	-35.2	0.1
				Earthquake Y Mode 4	0.2	0.1	-0.2	0.1	-0.1	0.0	0.2	-0.0	0.0	0.1	-0.1	0.0
				Earthquake Y Mode 5	-1.3	-0.3	-0.1	-0.1	-0.0	0.0	-1.3	0.0	0.0	-0.1	-0.0	0.0
				Earthquake Y Mode 6	5.6	0.3	2.7	0.2	1.4	-0.0	5.6	-0.2	-0.6	0.2	1.4	-0.0
				Earthquake Y Mode 7	-0.0	0.2	-0.3	0.1	-0.2	0.0	-0.0	-0.2	0.3	0.1	-0.2	0.0
				Earthquake Y Mode 8	-0.4	0.7	1.7	0.5	1.4	0.0	-0.4	-0.6	-1.6	0.5	1.4	0.0
				Earthquake Y Mode 9	-0.2	0.5	0.0	0.4	0.0	-0.0	-0.2	-0.5	-0.0	0.4	0.0	-0.0
	Floor 2	50x50	3.00/5.40	Self weight	889.4	-12.1	-67.4	-10.4	-54.6	0.0	874.6	12.9	63.7	-10.4	-54.6	0.0
				Dead load	139.5	-2.1	-9.5	-1.8	-7.7	-0.0	139.5	2.2	8.9	-1.8	-7.7	-0.0
				Live load	390.7	-6.8	-41.3	-5.8	-33.5	0.0	390.7	7.1	39.1	-5.8	-33.5	0.0
				Wind +X ecc.+	-5.3	-3.6	-0.1	-2.9	-0.1	0.0	-5.3	3.4	0.1	-2.9	-0.1	0.0
				Wind +X ecc.-	-4.8	-3.9	0.9	-3.2	0.8	-0.0	-4.8	3.7	-0.9	-3.2	0.8	-0.0
				Wind -X ecc.+	5.3	3.6	0.1	2.9	0.1	-0.0	5.3	-3.4	-0.1	2.9	0.1	-0.0
				Wind -X ecc.-	4.8	3.9	-0.9	3.2	-0.8	0.0	4.8	-3.7	0.9	3.2	-0.8	0.0
				Wind +Y ecc.+	-6.3	-1.3	-4.0	-1.0	-3.3	-0.0	-6.3	1.2	4.0	-1.0	-3.3	-0.0
				Wind +Y ecc.-	-8.4	0.3	-8.7	0.2	-7.2	0.0	-8.4	-0.3	8.6	0.2	-7.2	0.0
				Wind -Y ecc.+	6.3	1.3	4.0	1.0	3.3	0.0	6.3	-1.2	-4.0	1.0	3.3	0.0
				Wind -Y ecc.-	8.4	-0.3	8.7	-0.2	7.2	-0.0	8.4	0.3	-8.6	-0.2	7.2	-0.0
				Earthquake X Mode 1	-12.0	-17.3	15.9	-13.8	12.9	-0.2	-12.0	15.8	-15.0	-13.8	12.9	-0.2
				Earthquake X Mode 2	61.3	35.4	3.9	28.2	3.1	-0.1	61.3	-32.2	-3.6	28.2	3.1	-0.1
				Earthquake X Mode 3	-10.6	-1.0	-7.9	-0.8	-6.4	0.0	-10.6	1.0	7.5	-0.8	-6.4	0.0
				Earthquake X Mode 4	0.7	-1.1	1.2	-1.0	1.2	-0.0	0.7	1.4	-1.7	-1.0	1.2	-0.0
				Earthquake X Mode 5	-6.1	2.4	0.6	2.3	0.6	-0.0	-6.1	-3.1	-0.8	2.3	0.6	-0.0
				Earthquake X Mode 6	0.7	-0.0	-0.3	-0.0	-0.3	0.0	0.7	0.0	0.5	-0.0	-0.3	0.0
				Earthquake X Mode 7	-0.0	0.2	-0.3	0.1	-0.1	0.0	-0.0	0.0	-0.0	0.1	-0.1	0.0
				Earthquake X Mode 8	-0.0	0.1	0.2	0.0	0.1	-0.0	-0.0	0.0	-0.0	0.0	0.1	-0.0
				Earthquake X Mode 9	-0.0	0.3	-0.0	0.1	-0.0	-0.0	-0.0	0.1	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-5.5	-7.9	7.2	-6.3	5.8	-0.1	-5.5	7.2	-6.8	-6.3	5.8	-0.1
				Earthquake Y Mode 2	18.9	10.9	1.2	8.7	1.0	-0.0	18.9	-10.0	-1.1	8.7	1.0	-0.0
				Earthquake Y Mode 3	-65.4	-6.1	-48.7	-5.0	-39.5	0.1	-65.4	5.9	46.1	-5.0	-39.5	0.1
				Earthquake Y												



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	50x50	0.00/2.40	Self weight	1109.6	-5.0	-33.6	-5.4	-36.8	0.0	1094.9	8.1	54.8	-5.4	-36.8	0.0
				Dead load	165.3	-0.8	-4.7	-0.9	-5.1	0.0	165.3	1.3	7.6	-0.9	-5.1	0.0
				Live load	505.7	-2.8	-20.5	-3.1	-22.5	0.0	505.7	4.6	33.5	-3.1	-22.5	0.0
				Wind +X ecc.+	-7.2	-3.3	-0.1	-2.2	-0.1	0.0	-7.2	2.1	0.1	-2.2	-0.1	0.0
				Wind +X ecc.-	-6.6	-3.7	1.1	-2.5	0.7	-0.0	-6.6	2.3	-0.7	-2.5	0.7	-0.0
				Wind -X ecc.+	7.2	3.3	0.1	2.2	0.1	-0.0	7.2	-2.1	-0.1	2.2	0.1	-0.0
				Wind -X ecc.-	6.6	3.7	-1.1	2.5	-0.7	0.0	6.6	-2.3	0.7	2.5	-0.7	0.0
				Wind +Y ecc.+	-7.9	-0.9	-4.9	-0.6	-3.4	-0.0	-7.9	0.6	3.2	-0.6	-3.4	-0.0
				Wind +Y ecc.-	-10.4	0.8	-10.3	0.5	-7.1	0.0	-10.4	-0.5	6.6	0.5	-7.1	0.0
				Wind -Y ecc.+	7.9	0.9	4.9	0.6	3.4	0.0	7.9	-0.6	-3.2	0.6	3.4	0.0
				Wind -Y ecc.-	10.4	-0.8	10.3	-0.5	7.1	-0.0	10.4	0.5	-6.6	-0.5	7.1	-0.0
				Earthquake X Mode 1	-16.6	-14.9	15.9	-10.0	10.7	-0.1	-16.6	9.1	-9.6	-10.0	10.7	-0.1
				Earthquake X Mode 2	79.1	29.1	3.1	19.5	2.1	-0.1	79.1	-17.8	-2.0	19.5	2.1	-0.1
				Earthquake X Mode 3	-12.9	-0.4	-8.1	-0.3	-5.5	0.0	-12.9	0.3	5.0	-0.3	-5.5	0.0
				Earthquake X Mode 4	0.2	-1.9	2.6	-1.3	1.8	-0.0	0.2	1.3	-1.8	-1.3	1.8	-0.0
				Earthquake X Mode 5	-3.7	4.0	1.2	2.9	0.8	-0.0	-3.7	-2.8	-0.8	2.9	0.8	-0.0
				Earthquake X Mode 6	0.5	-0.0	-0.8	-0.0	-0.5	0.0	0.5	0.0	0.5	-0.0	-0.5	0.0
				Earthquake X Mode 7	-0.1	-0.5	0.9	-0.4	0.7	-0.0	-0.1	0.4	-0.8	-0.4	0.7	-0.0
				Earthquake X Mode 8	-0.2	-0.2	-0.6	-0.2	-0.5	0.0	-0.2	0.2	0.5	-0.2	-0.5	0.0
				Earthquake X Mode 9	-0.5	-1.2	-0.1	-0.9	-0.0	0.0	-0.5	1.0	0.0	-0.9	-0.0	0.0
				Earthquake Y Mode 1	-7.5	-6.8	7.2	-4.5	4.8	-0.0	-7.5	4.1	-4.4	-4.5	4.8	-0.0
				Earthquake Y Mode 2	24.4	9.0	1.0	6.0	0.7	-0.0	24.4	-5.5	-0.6	6.0	0.7	-0.0
				Earthquake Y Mode 3	-79.5	-2.6	-50.0	-1.9	-33.7	0.1	-79.5	2.0	30.8	-1.9	-33.7	0.1
				Earthquake Y Mode 4	0.0	-0.4	0.5	-0.3	0.4	-0.0	0.0	0.3	-0.3	-0.3	0.4	-0.0
				Earthquake Y Mode 5	-0.7	0.7	0.2	0.5	0.2	-0.0	-0.7	-0.5	-0.2	0.5	0.2	-0.0
				Earthquake Y Mode 6	4.2	-0.3	-6.3	-0.2	-4.5	0.0	4.2	0.2	4.5	-0.2	-4.5	0.0
				Earthquake Y Mode 7	-0.0	-0.1	0.3	-0.1	0.2	-0.0	-0.0	0.1	-0.2	-0.1	0.2	-0.0
				Earthquake Y Mode 8	-0.4	-0.6	-1.6	-0.4	-1.2	0.0	-0.4	0.5	1.3	-0.4	-1.2	0.0
				Earthquake Y Mode 9	-0.2	-0.4	-0.0	-0.3	-0.0	0.0	-0.2	0.4	0.0	-0.3	-0.0	0.0
C10	techo	50x50	12.00/14.40	Self weight	247.9	10.0	-82.1	6.9	-55.3	0.0	233.2	-6.5	50.5	6.9	-55.3	0.0
				Dead load	27.5	-0.3	-8.0	0.5	-4.5	-0.0	27.5	-1.5	2.9	0.5	-4.5	-0.0
				Live load	37.9	4.9	-35.0	3.3	-21.3	0.0	37.9	-3.0	16.1	3.3	-21.3	0.0
				Wind +X ecc.+	0.8	-1.1	0.1	-0.8	0.1	0.0	0.8	0.8	-0.1	-0.8	0.1	0.0
				Wind +X ecc.-	0.9	-1.2	0.2	-0.9	0.1	-0.0	0.9	0.9	-0.1	-0.9	0.1	-0.0
				Wind -X ecc.+	-0.8	1.1	-0.1	0.8	-0.1	-0.0	-0.8	-0.8	0.1	0.8	-0.1	-0.0
				Wind -X ecc.-	-0.9	1.2	-0.2	0.9	-0.1	0.0	-0.9	-0.9	0.1	0.9	-0.1	0.0
				Wind +Y ecc.+	0.4	-0.1	-2.0	-0.1	-1.3	-0.0	0.4	0.1	1.1	-0.1	-1.3	-0.0
				Wind +Y ecc.-	0.2	0.5	-2.3	0.4	-1.5	0.0	0.2	-0.4	1.3	0.4	-1.5	0.0
				Wind -Y ecc.+	-0.4	0.1	2.0	0.1	1.3	0.0	-0.4	-0.1	-1.1	0.1	1.3	0.0
				Wind -Y ecc.-	-0.2	-0.5	2.3	-0.4	1.5	-0.0	-0.2	0.4	-1.3	-0.4	1.5	-0.0
				Earthquake X Mode 1	4.6	-7.3	0.4	-5.2	0.3	-0.1	4.6	5.2	-0.2	-5.2	0.3	-0.1
				Earthquake X Mode 2	-10.4	14.0	-4.8	10.0	-3.0	-0.1	-10.4	-10.0	2.4	10.0	-3.0	-0.1
				Earthquake X Mode 3	-0.3	0.1	-2.9	0.1	-1.8	0.0	-0.3	-0.1	1.6	0.1	-1.8	0.0
				Earthquake X Mode 4	-1.7	1.8	-0.9	1.2	-0.6	0.0	-1.7	-1.1	0.4	1.2	-0.6	0.0
				Earthquake X Mode 5	2.0	-3.8	0.3	-2.5	0.2	0.0	2.0	2.2	-0.1	-2.5	0.2	0.0
				Earthquake X Mode 6	0.7	0.0	0.8	0.0	0.5	-0.0	0.7	-0.0	-0.4	0.0	0.5	-0.0
				Earthquake X Mode 7	0.9	-0.5	0.6	-0.3	0.4	-0.0	0.9	0.2	-0.3	-0.3	0.4	-0.0
				Earthquake X Mode 8	-0.9	-0.3	-0.9	-0.1	-0.5	-0.0	-0.9	0.1	0.4	-0.1	-0.5	-0.0
				Earthquake X Mode 9	0.9	-1.3	0.4	-0.8	0.2	0.0	0.9	0.6	-0.2	-0.8	0.2	0.0
				Earthquake Y Mode 1	2.1	-3.3	0.2	-2.4	0.1	-0.0	2.1	2.4	-0.1	-2.4	0.1	-0.0
				Earthquake Y Mode 2	-3.2	4.3	-1.5	3.1	-0.9	-0.0	-3.2	-3.1	0.8	3.1	-0.9	-0.0
				Earthquake Y Mode 3	-1.6	0.8	-17.6	0.5	-11.3	0.0	-1.6	-0.4	9.6	0.5	-11.3	0.0
				Earthquake Y Mode 4	-0.3	0.4	-0.2	0.2	-0.1	0.0	-0.3	-0.2	0.1	0.2	-0.1	0.0
				Earthquake Y Mode 5	0.4	-0.7	0.0	-0.5	0.0	0.0	0.4	0.4	-0.0	-0.5	0.0	0.0
				Earthquake Y Mode 6	5.8	0.2	6.7	0.1	4.2	-0.0	5.8	-0.1	-3.3	0.1	4.2	-0.0
				Earthquake Y Mode 7	0.3	-0.2	0.2	-0.1	0.1	-0.0	0.3	0.1	-0.1	-0.1	0.1	-0.0
				Earthquake Y Mode 8	-2.2	-0.6	-2.1	-0.4	-1.3	-0.0	-2.2	0.3	1.0	-0.4	-1.3	-0.0
				Earthquake Y Mode 9	0.3	-0.5	0.1	-0.3	0.1	0.0	0.3	0.2	-0.1	-0.3	0.1	0.0
	Floor 4	50x50	9.00/11.40	Self weight	391.8	8.9	-81.8	7.5	-68.9	0.0	377.1	-9.2	83.7	7.5	-68.9	0.0
				Dead load	65.9	-3.2	-12.3	-2.8	-10.5	-0.0	65.9	3.5	12.8	-2.8	-10.5	-0.0
				Live load	130.2	4.8	-46.7	4.0	-39.7	0.0	130.2	-4.9	48.5	4.0	-39.7	0.0
				Wind +X ecc.+	2.0	-1.8	0.2	-1.7	0.1	0.0	2.0	2.2	-0.2	-1.7	0.1	0.0
				Wind +X ecc.-	2.4	-2.1	0.3	-1.9	0.3	-0.0	2.4	2.4	-0.4	-1.9	0.3	-0.0
				Wind -X ecc.+	-2.0	1.8	-0.2	1.7	-0.1	-0.0	-2.0	-2.2	0.2	1.7	-0.1	-0.0
				Wind -X ecc.-	-2.4	2.1	-0.3	1.9	-0.3	0.0	-2.4	-2.4	0.4	1.9	-0.3	0.0
				Wind +Y ecc.+	-5.4	-0.4	-5.0	-0.3	-4.3	-0.0	-5.4	0.5	5.3	-0.3	-4.3	-0.0
				Wind +Y ecc.-	-7.0	0.7	-5.9	0.6	-5.0	0.0	-7.0	-0.8	6.2	0.6	-5.0	0.0
				Wind -Y ecc.+	5.4	0.4	5.0	0.3	4.3	0.0	5.4	-0.5	-5.3	0.3	4.3	0.0
				Wind -Y ecc.-	7.0	-0.7	5.9	-0.6	5.0	-0.0	7.0	0.8	-6.2	-0.6	5.0	-0.0
				Earthquake X Mode 1	11.4	-11.5	1.2	-10.2	1.0	-0.1	11.4	13.1	-1.3	-10.2	1.0	-0.1
				Earthquake X Mode 2	-34.0	22.0	-9.0	19.6	-7.7	-0.1	-34.0	-25.0	9.5	19.6	-7.7	-0.1
				Earthquake X Mode 3	-8.5	-0.0	-6.5	-0.1	-5.5	0.0	-8.5	0.1	6.8	-0.1	-5.5	0.0
				Earthquake X Mode 4	-4.7	2.0	-1.2	1.5	-1.0	0.0	-4.7	-1.6	1.1	1.5	-1.0	0.0
				Earthquake X Mode 5	4.4	-4.0	0.4	-3.0	0.3	0.0	4.4	3.0	-0.4	-3.0	0.3	0.0
				Earthquake X Mode 6	2.7	0.0	1.0	0.0	0.8	-0.0	2.7	-0.0	-1.0	0.0	0.8	-0.0
				Earthquake X Mode 7	1.5	-0.1	0.0	0.0	-0.0	0.0	1.5	-0.2	0.0	0.0	-0.0	0.0
				Earthquake X Mode 8	-1.6	-0.0	0.0	0.0	0.0	0.0	-1.6	-0.1	-0.1	0.0	0.0	0.0
				Earthquake X Mode 9	1.4	-0.1	0.0	0.2	0.0	-0.0	1.4	-0.5	0.0	0.2	0.0	-0.0
				Earthquake Y Mode 1	5.2	-5.2	0.5	-4.6	0.5	-0.1	5.2	5.9	-0.6	-4.6	0.5	-0.1
				Earthquake Y Mode 2	-10.5	6.8	-2.8	6.0	-2.4	-0.0	-10.5	-7.7	2.9	6.0	-2.4	-0.0
				Earthquake Y Mode 3	-52.4	-0.3	-40.1	-0.3	-34.1	0.1	-52.4	0.5	41.6	-0.3	-34.1	0.1
				Earthquake Y Mode 4	-0											



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.40	Self weight	554.0	7.3	-74.6	6.3	-63.3	0.0	539.3	-7.8	77.4	6.3	-63.3	0.0	0.0
				Dead load	102.7	-3.0	-11.0	-2.4	-9.2	-0.0	102.7	2.8	11.1	-2.4	-9.2	-0.0
				Live load	221.9	3.9	-42.3	3.4	-35.7	0.0	221.9	-4.2	43.4	3.4	-35.7	0.0
				Wind +X ecc.+	3.3	-2.5	0.1	-2.2	0.1	0.0	3.3	2.7	-0.1	-2.2	0.1	0.0
				Wind +X ecc.-	4.3	-2.8	0.4	-2.4	0.4	-0.0	4.3	3.1	-0.4	-2.4	0.4	-0.0
				Wind -X ecc.+	-3.3	2.5	-0.1	2.2	-0.1	-0.0	-3.3	-2.7	0.1	2.2	-0.1	-0.0
				Wind -X ecc.-	-4.3	2.8	-0.4	2.4	-0.4	0.0	-4.3	-3.1	0.4	2.4	-0.4	0.0
				Wind +Y ecc.+	-17.5	-0.6	-7.6	-0.5	-6.4	-0.0	-17.5	0.6	7.7	-0.5	-6.4	-0.0
				Wind +Y ecc.-	-21.9	0.8	-9.1	0.7	-7.7	0.0	-21.9	-0.9	9.2	0.7	-7.7	0.0
				Wind -Y ecc.+	17.5	0.6	7.6	0.5	6.4	0.0	17.5	-0.6	-7.7	0.5	6.4	0.0
				Wind -Y ecc.-	21.9	-0.8	9.1	-0.7	7.7	-0.0	21.9	0.9	-9.2	-0.7	7.7	-0.0
				Earthquake X Mode 1	20.7	-14.4	2.1	-12.3	1.8	-0.2	20.7	15.2	-2.2	-12.3	1.8	-0.2
				Earthquake X Mode 2	-64.2	27.6	-10.4	23.4	-8.7	-0.1	-64.2	-28.7	10.5	23.4	-8.7	-0.1
				Earthquake X Mode 3	-23.4	-0.2	-9.0	-0.1	-7.5	0.0	-23.4	0.1	9.0	-0.1	-7.5	0.0
				Earthquake X Mode 4	-6.5	0.8	-0.4	0.4	-0.3	0.0	-6.5	-0.1	0.3	0.4	-0.3	0.0
				Earthquake X Mode 5	5.6	-1.5	0.2	-0.6	0.2	0.0	5.6	-0.1	-0.2	-0.6	0.2	0.0
				Earthquake X Mode 6	3.7	-0.0	0.3	-0.0	0.2	-0.0	3.7	0.0	-0.2	-0.0	0.2	-0.0
				Earthquake X Mode 7	0.4	0.5	-0.7	0.4	-0.6	0.0	0.4	-0.5	0.7	0.4	-0.6	0.0
				Earthquake X Mode 8	-0.2	0.3	1.0	0.2	0.8	0.0	-0.2	-0.2	-1.0	0.2	0.8	0.0
				Earthquake X Mode 9	0.5	1.2	-0.4	1.0	-0.4	-0.0	0.5	-1.1	0.4	1.0	-0.4	-0.0
				Earthquake Y Mode 1	9.4	-6.6	0.9	-5.6	0.8	-0.1	9.4	6.9	-1.0	-5.6	0.8	-0.1
				Earthquake Y Mode 2	-19.8	8.5	-3.2	7.2	-2.7	-0.0	-19.8	-8.9	3.3	7.2	-2.7	-0.0
				Earthquake Y Mode 3	-144.1	-1.2	-55.5	-0.9	-46.2	0.1	-144.1	0.9	55.4	-0.9	-46.2	0.1
				Earthquake Y Mode 4	-1.2	0.2	-0.1	0.1	-0.1	0.0	-1.2	-0.0	0.1	0.1	-0.1	0.0
				Earthquake Y Mode 5	1.0	-0.3	0.0	-0.1	0.0	0.0	1.0	-0.0	-0.0	-0.1	0.0	0.0
				Earthquake Y Mode 6	30.5	-0.1	2.2	-0.1	1.5	-0.0	30.5	0.3	-1.3	-0.1	1.5	-0.0
				Earthquake Y Mode 7	0.1	0.2	-0.2	0.1	-0.2	0.0	0.1	-0.1	0.2	0.1	-0.2	0.0
				Earthquake Y Mode 8	-0.5	0.6	2.5	0.5	2.1	0.0	-0.5	-0.6	-2.5	0.5	2.1	0.0
				Earthquake Y Mode 9	0.2	0.5	-0.2	0.4	-0.1	-0.0	0.2	-0.4	0.2	0.4	-0.1	-0.0
Floor 2	50x50	3.00/5.40	Self weight	738.5	5.3	-69.5	4.7	-58.3	0.0	723.8	-5.9	70.5	4.7	-58.3	0.0	0.0
				Dead load	142.0	-3.9	-10.4	-3.1	-8.7	0.0	142.0	3.5	10.4	-3.1	-8.7	0.0
				Live load	323.7	2.9	-40.6	2.6	-33.9	0.0	323.7	-3.2	40.9	2.6	-33.9	0.0
				Wind +X ecc.+	4.6	-3.1	0.0	-2.5	0.0	0.0	4.6	2.9	-0.0	-2.5	0.0	0.0
				Wind +X ecc.-	6.6	-3.5	0.5	-2.8	0.4	-0.0	6.6	3.3	-0.5	-2.8	0.4	-0.0
				Wind -X ecc.+	-4.6	3.1	-0.0	2.5	-0.0	-0.0	-4.6	-2.9	0.0	2.5	-0.0	-0.0
				Wind -X ecc.-	-6.6	3.5	-0.5	2.8	-0.4	0.0	-6.6	-3.3	0.5	2.8	-0.4	0.0
				Wind +Y ecc.+	-35.2	-0.8	-10.1	-0.6	-8.2	-0.0	-35.2	0.7	9.6	-0.6	-8.2	-0.0
				Wind +Y ecc.-	-44.4	0.8	-12.4	0.7	-10.1	0.0	-44.4	-0.9	11.9	0.7	-10.1	0.0
				Wind -Y ecc.+	35.2	0.8	10.1	0.6	8.2	0.0	35.2	-0.7	-9.6	0.6	8.2	0.0
				Wind -Y ecc.-	44.4	-0.8	12.4	-0.7	10.1	-0.0	44.4	0.9	-11.9	-0.7	10.1	-0.0
				Earthquake X Mode 1	32.7	-16.2	3.4	-12.9	2.8	-0.2	32.7	14.7	-3.4	-12.9	2.8	-0.2
				Earthquake X Mode 2	-96.9	30.9	-10.5	24.4	-8.7	-0.1	-96.9	-27.6	10.2	24.4	-8.7	-0.1
				Earthquake X Mode 3	-43.3	-0.3	-10.9	-0.2	-8.8	0.0	-43.3	0.1	10.3	-0.2	-8.8	0.0
				Earthquake X Mode 4	-5.5	-0.9	0.7	-0.9	0.6	-0.0	-5.5	1.3	-0.8	-0.9	0.6	-0.0
				Earthquake X Mode 5	5.3	2.1	0.0	2.1	0.0	-0.0	5.3	-2.9	-0.0	2.1	0.0	-0.0
				Earthquake X Mode 6	2.8	-0.0	-0.7	-0.0	-0.6	0.0	2.8	0.1	0.8	-0.0	-0.6	0.0
				Earthquake X Mode 7	-0.5	0.2	-0.1	0.0	-0.1	0.0	-0.5	0.0	0.1	0.0	-0.1	0.0
				Earthquake X Mode 8	0.9	0.1	0.2	0.0	0.1	-0.0	0.9	0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 9	-0.2	0.3	-0.1	0.1	-0.0	-0.0	-0.2	0.2	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	14.9	-7.3	1.6	-5.8	1.3	-0.1	14.9	6.7	-1.5	-5.8	1.3	-0.1
				Earthquake Y Mode 2	-29.9	9.5	-3.3	7.5	-2.7	-0.0	-29.9	-8.5	3.2	7.5	-2.7	-0.0
				Earthquake Y Mode 3	-266.3	-1.9	-67.0	-1.1	-54.3	0.1	-266.3	0.9	63.2	-1.1	-54.3	0.1
				Earthquake Y Mode 4	-1.1	-0.2	0.1	-0.2	0.1	-0.0	-1.1	0.2	-0.1	-0.2	0.1	-0.0
				Earthquake Y Mode 5	1.0	0.4	0.0	0.4	0.0	-0.0	1.0	-0.5	-0.0	0.4	0.0	-0.0
				Earthquake Y Mode 6	23.0	-0.4	-5.8	-0.4	-5.0	0.0	23.0	0.5	6.2	-0.4	-5.0	0.0
				Earthquake Y Mode 7	-0.1	0.0	-0.0	0.0	-0.0	0.0	-0.1	0.0	0.0	0.0	-0.0	0.0
				Earthquake Y Mode 8	2.3	0.1	0.4	0.0	0.3	-0.0	2.3	0.1	-0.3	0.0	0.3	-0.0
				Earthquake Y Mode 9	-0.1	0.1	-0.0	0.0	-0.0	-0.0	-0.1	0.1	0.0	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.40	Self weight	967.1	1.9	-31.2	2.2	-34.4	0.0	952.4	-3.4	51.2	2.2	-34.4	0.0	0.0
				Dead load	187.2	-2.0	-4.7	-2.2	-5.1	0.0	187.2	3.3	7.5	-2.2	-5.1	0.0
				Live load	448.4	1.1	-18.4	1.2	-20.2	0.0	448.4	-1.9	30.2	1.2	-20.2	0.0
				Wind +X ecc.+	5.6	-3.1	-0.0	-2.0	-0.0	0.0	5.6	1.7	0.0	-2.0	-0.0	0.0
				Wind +X ecc.-	8.9	-3.5	0.5	-2.3	0.4	-0.0	8.9	2.0	-0.5	-2.3	0.4	-0.0
				Wind -X ecc.+	-5.6	3.1	0.0	2.0	0.0	-0.0	-5.6	-1.7	-0.0	2.0	0.0	-0.0
				Wind -X ecc.-	-8.9	3.5	-0.5	2.3	-0.4	0.0	-8.9	-2.0	0.5	2.3	-0.4	0.0
				Wind +Y ecc.+	-54.3	-0.7	-8.5	-0.4	-6.6	-0.0	-54.3	0.3	7.4	-0.4	-6.6	-0.0
				Wind +Y ecc.-	-69.4	1.0	-11.0	0.7	-8.6	0.0	-69.4	-0.7	9.6	0.7	-8.6	0.0
				Wind -Y ecc.+	54.3	0.7	8.5	0.4	6.6	0.0	54.3	-0.3	-7.4	0.4	6.6	0.0
				Wind -Y ecc.-	69.4	-1.0	11.0	-0.7	8.6	-0.0	69.4	0.7	-9.6	-0.7	8.6	-0.0
				Earthquake X Mode 1	46.2	-14.3	4.1	-9.3	3.2	-0.1	46.2	8.1	-3.7	-9.3	3.2	-0.1
				Earthquake X Mode 2	-123.3	27.2	-6.9	17.4	-5.3	-0.1	-123.3	-14.6	5.9	17.4	-5.3	-0.1
				Earthquake X Mode 3	-63.1	-0.2	-8.7	-0.1	-6.7	0.0	-63.1	-0.0	7.4	-0.1	-6.7	0.0
				Earthquake X Mode 4	-2.7	-1.8	1.1	-1.2	0.9	-0.0	-2.7	1.2	-1.1	-1.2	0.9	-0.0
				Earthquake X Mode 5	4.2	3.8	-0.0	2.6	0.0	-0.0	4.2	-2.4	-0.0	2.6	0.0	-0.0
				Earthquake X Mode 6	0.7	-0.0	-0.9	-0.0	-0.8	0.0	0.7	0.0	0.9	-0.0	-0.8	0.0
				Earthquake X Mode 7	0.3	-0.5	0.5	-0.4	0.4	-0.0	0.3	0.4	-0.5	-0.4	0.4	-0.0
				Earthquake X Mode 8	-0.1	-0.2	-0.8	-0.2	-0.6	0.0	-0.1	0.2	0.8	-0.2	-0.6	0.0
				Earthquake X Mode 9	0.5	-1.2	0.3	-0.9	0.3	0.0	0.5	0.9	-0.3	-0.9	0.3	0.0
				Earthquake Y Mode 1	21.0	-6.5	1.9	-4.2	1.5	-0.0	21.0	3.7	-1.7	-4.2	1.5	-0.0
				Earthquake Y Mode 2	-38.1	8.4	-2.1	5.4	-1.6	-						



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C11	techo	40x30	12.00/14.50	Self weight	160.6	0.7	-11.3	0.4	-7.6	0.0	153.2	-0.3	7.6	0.4	-7.6	0.0
				Dead load	66.8	0.1	1.1	0.1	1.6	-0.0	66.8	-0.1	-2.8	0.1	1.6	-0.0
				Live load	31.4	0.4	-5.5	0.2	-3.2	0.0	31.4	-0.2	2.5	0.2	-3.2	0.0
				Wind +X ecc.+	0.0	-0.7	-0.0	-0.4	-0.0	0.0	0.0	0.4	0.0	-0.4	-0.0	0.0
				Wind +X ecc.-	0.0	-0.8	-0.0	-0.5	-0.0	-0.0	0.0	0.4	0.0	-0.5	-0.0	-0.0
				Wind -X ecc.+	-0.0	0.7	0.0	0.4	0.0	-0.0	-0.0	-0.4	-0.0	0.4	0.0	-0.0
				Wind -X ecc.-	-0.0	0.8	0.0	0.5	0.0	-0.0	-0.0	-0.4	-0.0	0.5	0.0	0.0
				Wind +Y ecc.+	-0.4	-0.1	-0.4	-0.1	-0.3	-0.0	-0.4	0.1	0.3	-0.1	-0.3	-0.0
				Wind +Y ecc.-	-0.4	0.2	-0.3	0.1	-0.2	0.0	-0.4	-0.1	0.2	0.1	-0.2	0.0
				Wind -Y ecc.+	0.4	0.1	0.4	0.1	0.3	0.0	0.4	-0.1	-0.3	0.1	0.3	0.0
				Wind -Y ecc.-	0.4	-0.2	0.3	-0.1	0.2	-0.0	0.4	0.1	-0.2	-0.1	0.2	-0.0
				Earthquake X Mode 1	-0.0	-4.0	-0.5	-2.4	-0.3	-0.0	-0.0	2.0	0.3	-2.4	-0.3	-0.0
				Earthquake X Mode 2	-0.6	9.0	-0.7	5.4	-0.5	-0.0	-0.6	-4.6	0.5	5.4	-0.5	-0.0
				Earthquake X Mode 3	-0.4	-0.1	-0.4	-0.1	-0.3	0.0	-0.4	0.0	0.3	-0.1	-0.3	0.0
				Earthquake X Mode 4	-0.1	0.9	0.0	0.5	0.0	0.0	-0.1	-0.4	-0.0	0.5	0.0	0.0
				Earthquake X Mode 5	0.1	-1.9	0.1	-1.1	0.1	0.0	0.1	0.9	-0.1	-1.1	0.1	0.0
				Earthquake X Mode 6	0.0	0.0	0.1	0.0	0.1	-0.0	0.0	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 7	0.0	-0.2	0.0	-0.1	0.0	-0.0	0.0	0.1	-0.0	-0.1	0.0	-0.0
				Earthquake X Mode 8	0.0	-0.1	-0.1	-0.1	-0.1	-0.0	0.0	0.0	0.1	-0.1	-0.1	-0.0
				Earthquake X Mode 9	0.0	-0.5	0.1	-0.3	0.0	0.0	0.0	0.2	-0.0	-0.3	0.0	0.0
				Earthquake Y Mode 1	-0.0	-1.8	-0.2	-1.1	-0.1	-0.0	-0.0	0.9	0.2	-1.1	-0.1	-0.0
				Earthquake Y Mode 2	-0.2	2.8	-0.2	1.7	-0.1	-0.0	-0.2	-1.4	0.1	1.7	-0.1	-0.0
				Earthquake Y Mode 3	-2.4	-0.5	-2.5	-0.3	-1.6	0.0	-2.4	0.3	1.7	-0.3	-1.6	0.0
				Earthquake Y Mode 4	-0.0	0.2	0.0	0.1	0.0	0.0	-0.0	-0.1	-0.0	0.1	0.0	0.0
				Earthquake Y Mode 5	0.0	-0.4	0.0	-0.2	0.0	0.0	0.0	0.2	-0.0	-0.2	0.0	0.0
				Earthquake Y Mode 6	0.2	0.2	0.8	0.1	0.5	-0.0	0.2	-0.1	-0.5	0.1	0.5	-0.0
				Earthquake Y Mode 7	0.0	-0.1	0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0
				Earthquake Y Mode 8	0.0	-0.2	-0.3	-0.1	-0.2	-0.0	0.0	0.1	-0.1	-0.2	-0.0	-0.0
				Earthquake Y Mode 9	0.0	-0.2	0.0	-0.1	0.0	0.0	0.0	0.1	-0.0	-0.1	0.0	0.0
	Floor 4	40x30	9.00/11.50	Self weight	303.9	0.8	-11.2	0.7	-9.0	0.0	296.6	-0.8	11.3	0.7	-9.0	0.0
				Dead load	81.4	0.2	-2.3	0.2	-2.0	-0.0	81.4	-0.2	2.8	0.2	-2.0	-0.0
				Live load	117.0	0.4	-7.7	0.3	-6.3	0.0	117.0	-0.4	8.1	0.3	-6.3	0.0
				Wind +X ecc.+	0.0	-1.3	-0.0	-1.1	-0.0	0.0	0.0	1.4	0.0	-1.1	-0.0	0.0
				Wind +X ecc.-	0.0	-1.5	-0.0	-1.2	-0.0	-0.0	0.0	1.5	0.0	-1.2	-0.0	-0.0
				Wind -X ecc.+	-0.0	1.3	0.0	1.1	0.0	-0.0	-0.0	-1.4	-0.0	1.1	0.0	-0.0
				Wind -X ecc.-	-0.0	1.5	0.0	1.2	0.0	-0.0	-0.0	-1.5	-0.0	1.2	0.0	0.0
				Wind +Y ecc.+	-0.9	-0.3	-0.8	-0.2	-0.6	-0.0	-0.9	0.3	0.9	-0.2	-0.6	-0.0
				Wind +Y ecc.-	-1.0	0.3	-0.7	0.3	-0.6	0.0	-1.0	-0.4	0.8	0.3	-0.6	0.0
				Wind -Y ecc.+	0.9	0.3	0.8	0.2	0.6	0.0	0.9	-0.3	-0.9	0.2	0.6	0.0
				Wind -Y ecc.-	1.0	-0.3	0.7	-0.3	0.6	-0.0	1.0	0.4	-0.8	-0.3	0.6	-0.0
				Earthquake X Mode 1	-0.2	-7.5	-0.8	-6.1	-0.7	-0.0	-0.2	7.8	0.9	-6.1	-0.7	-0.0
				Earthquake X Mode 2	-1.5	15.9	-1.4	12.9	-1.2	-0.0	-1.5	-16.5	1.5	12.9	-1.2	-0.0
				Earthquake X Mode 3	-1.0	-0.2	-0.8	-0.2	-0.6	0.0	-1.0	0.2	0.9	-0.2	-0.6	0.0
				Earthquake X Mode 4	-0.1	1.0	0.0	0.8	0.0	0.0	-0.1	-1.0	-0.0	0.8	0.0	0.0
				Earthquake X Mode 5	0.2	-2.2	0.1	-1.8	0.1	0.0	0.2	2.2	-0.1	-1.8	0.1	0.0
				Earthquake X Mode 6	0.1	0.0	0.1	0.0	0.1	-0.0	0.1	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0
				Earthquake X Mode 8	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0
				Earthquake X Mode 9	0.0	0.0	0.0	0.1	-0.0	-0.0	0.0	-0.1	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-0.1	-3.4	-0.4	-2.8	-0.3	-0.0	-0.1	3.5	0.4	-2.8	-0.3	-0.0
				Earthquake Y Mode 2	-0.5	4.9	-0.4	4.0	-0.4	-0.0	-0.5	-5.1	0.5	4.0	-0.4	-0.0
				Earthquake Y Mode 3	-6.1	-1.2	-4.7	-1.0	-4.0	0.0	-6.1	1.2	5.3	-1.0	-4.0	0.0
				Earthquake Y Mode 4	-0.0	0.2	0.0	0.2	0.0	0.0	-0.0	-0.2	-0.0	0.2	0.0	0.0
				Earthquake Y Mode 5	0.0	-0.4	0.0	-0.3	0.0	0.0	0.0	0.4	-0.0	-0.3	0.0	0.0
				Earthquake Y Mode 6	0.6	0.2	1.0	0.1	0.8	-0.0	0.6	-0.2	-0.9	0.1	0.8	-0.0
				Earthquake Y Mode 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0
				Earthquake Y Mode 8	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0
				Earthquake Y Mode 9	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0
	Floor 3	40x30	6.00/8.50	Self weight	450.9	0.6	-10.7	0.5	-8.7	0.0	443.6	-0.6	11.0	0.5	-8.7	0.0
				Dead load	97.5	0.1	-1.7	0.1	-1.3	-0.0	97.5	-0.1	1.6	0.1	-1.3	-0.0
				Live load	203.5	0.3	-7.0	0.2	-5.7	0.0	203.5	-0.3	7.1	0.2	-5.7	0.0
				Wind +X ecc.+	0.0	-1.7	-0.0	-1.4	-0.0	0.0	0.0	1.7	0.0	-1.4	-0.0	0.0
				Wind +X ecc.-	0.1	-1.9	-0.0	-1.5	-0.0	-0.0	0.1	1.9	0.0	-1.5	-0.0	-0.0
				Wind -X ecc.+	-0.0	1.7	0.0	1.4	0.0	-0.0	-0.0	-1.7	-0.0	1.4	0.0	-0.0
				Wind -X ecc.-	-0.1	1.9	0.0	1.5	0.0	-0.0	-0.1	-1.9	-0.0	1.5	0.0	0.0
				Wind +Y ecc.+	-1.5	-0.4	-1.0	-0.3	-0.9	-0.0	-1.5	0.4	1.1	-0.3	-0.9	-0.0
				Wind +Y ecc.-	-1.6	0.4	-1.0	0.3	-0.8	0.0	-1.6	-0.4	1.0	0.3	-0.8	0.0
				Wind -Y ecc.+	1.5	0.4	1.0	0.3	0.9	0.0	1.5	-0.4	-1.1	0.3	0.9	0.0
				Wind -Y ecc.-	1.6	-0.4	1.0	-0.3	0.8	-0.0	1.6	0.4	-1.0	-0.3	0.8	-0.0
				Earthquake X Mode 1	-0.3	-8.9	-1.0	-7.1	-0.8	-0.0	-0.3	9.0	1.0	-7.1	-0.8	-0.0
				Earthquake X Mode 2	-2.6	18.4	-1.7	14.8	-1.4	-0.0	-2.6	-18.5	1.8	14.8	-1.4	-0.0
				Earthquake X Mode 3	-1.6	-0.2	-1.0	-0.2	-0.8	0.0	-1.6	0.2	1.0	-0.2	-0.8	0.0
				Earthquake X Mode 4	-0.1	0.3	-0.0	0.2	-0.0	0.0	-0.1	-0.2	0.0	0.2	-0.0	0.0
				Earthquake X Mode 5	0.2	-0.6	0.0	-0.4	0.0	0.0	0.2	0.4	0.0	-0.4	0.0	0.0
				Earthquake X Mode 6	0.1	-0.0	0.0	-0.0	0.0	-0.0	0.1	0.0	-0.0	-0.0	0.0	-0.0
				Earthquake X Mode 7	0.0	0.2	-0.0	0.2	-0.0	0.0	0.0	-0.2	0.0	0.2	-0.0	0.0
				Earthquake X Mode 8	0.0	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.1	0.1	0.1	0.0
				Earthquake X Mode 9	0.0	0.6	-0.1	0.5	-0.1	-0.0	0.0	-0.6	0.1	0.5	-0.1	-0.0
				Earthquake Y Mode 1	-0.1	-4.0	-0.4	-3.2	-0.3	-0.0	-0.1	4.1	0.4	-3.2	-0.3	-0.0
				Earthquake Y Mode 2	-0.8	5.7	-0.5	4.6	-0.4	-0.0	-0.8	-5.7	0.5	4.6	-0.4	-0.0
				Earthquake Y Mode 3	-9.9	-1.5	-6.0	-1.1	-4.9	0.0	-9.9	1.4	6.2	-1.1	-4.9	0.0
				Earthquake Y Mode 4	-0.0	0.1	-0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0	



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	40x30	3.00/5.50	Self weight	602.4	0.3	-11.0	0.3	-8.7	0.0	595.1	-0.4	10.7	0.3	-8.7	0.0
				Dead load	114.8	0.1	-1.8	0.0	-1.4	0.0	114.8	-0.1	1.7	0.0	-1.4	0.0
				Live load	292.5	0.1	-7.5	0.1	-5.9	0.0	292.5	-0.2	7.2	0.1	-5.9	0.0
				Wind +X ecc.+	0.1	-1.9	-0.0	-1.5	-0.0	0.0	0.1	1.8	0.0	-1.5	-0.0	0.0
				Wind +X ecc.-	0.1	-2.1	-0.0	-1.6	-0.0	-0.0	0.1	2.0	0.0	-1.6	-0.0	-0.0
				Wind -X ecc.+	-0.1	1.9	0.0	1.5	0.0	-0.0	-0.1	-1.8	-0.0	1.5	0.0	-0.0
				Wind -X ecc.-	-0.1	2.1	0.0	1.6	0.0	0.0	-0.1	-2.0	-0.0	1.6	0.0	0.0
				Wind +Y ecc.+	-2.0	-0.4	-1.3	-0.3	-1.0	-0.0	-2.0	0.4	1.2	-0.3	-1.0	-0.0
				Wind +Y ecc.-	-2.2	0.5	-1.2	0.4	-1.0	0.0	-2.2	-0.5	1.2	0.4	-1.0	0.0
				Wind -Y ecc.+	2.0	0.4	1.3	0.3	1.0	0.0	2.0	-0.4	-1.2	0.3	1.0	0.0
				Wind -Y ecc.-	2.2	-0.5	1.2	-0.4	1.0	-0.0	2.2	0.5	-1.2	-0.4	1.0	-0.0
				Earthquake X Mode 1	-0.2	-9.2	-1.0	-7.3	-0.7	-0.0	-0.2	9.0	0.8	-7.3	-0.7	-0.0
				Earthquake X Mode 2	-3.7	18.5	-1.9	14.7	-1.5	-0.0	-3.7	-18.2	1.7	14.7	-1.5	-0.0
				Earthquake X Mode 3	-2.2	-0.2	-1.1	-0.2	-0.9	0.0	-2.2	0.2	1.1	-0.2	-0.9	0.0
				Earthquake X Mode 4	-0.1	-0.5	-0.0	-0.4	-0.0	-0.0	-0.1	0.6	0.0	-0.4	-0.0	-0.0
				Earthquake X Mode 5	0.2	1.3	-0.1	1.0	-0.1	-0.0	0.2	-1.3	0.1	1.0	-0.1	-0.0
				Earthquake X Mode 6	0.1	-0.0	-0.1	-0.0	-0.1	0.0	0.1	0.0	0.1	-0.0	-0.1	0.0
				Earthquake X Mode 7	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0
				Earthquake X Mode 8	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0
				Earthquake X Mode 9	-0.0	0.1	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	-0.0
				Earthquake Y Mode 1	-0.1	-4.2	-0.4	-3.3	-0.3	-0.0	-0.1	4.1	0.4	-3.3	-0.3	-0.0
				Earthquake Y Mode 2	-1.2	5.7	-0.6	4.5	-0.5	-0.0	-1.2	-5.6	0.5	4.5	-0.5	-0.0
				Earthquake Y Mode 3	-13.3	-1.4	-6.9	-1.1	-5.4	0.0	-13.3	1.2	6.5	-1.1	-5.4	0.0
				Earthquake Y Mode 4	-0.0	-0.1	-0.0	-0.1	-0.0	-0.0	-0.0	0.1	0.0	-0.1	-0.0	-0.0
				Earthquake Y Mode 5	0.0	0.2	-0.0	0.2	-0.0	-0.0	0.0	-0.2	0.0	0.2	-0.0	-0.0
				Earthquake Y Mode 6	1.0	-0.2	-0.5	-0.2	-0.5	0.0	1.0	0.2	0.7	-0.2	-0.5	0.0
				Earthquake Y Mode 7	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0
				Earthquake Y Mode 8	0.0	0.0	0.1	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0
				Earthquake Y Mode 9	-0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	-0.0
	Floor 1	40x30	0.00/2.50	Self weight	761.8	0.0	-5.2	0.1	-5.4	0.0	754.5	-0.1	8.4	0.1	-5.4	0.0
				Dead load	133.2	0.0	-0.8	0.0	-0.9	0.0	133.2	-0.0	1.3	0.0	-0.9	0.0
				Live load	385.9	0.0	-3.5	0.0	-3.7	0.0	385.9	-0.1	5.7	0.0	-3.7	0.0
				Wind +X ecc.+	0.1	-1.3	-0.0	-1.0	-0.0	0.0	0.1	1.2	0.0	-1.0	-0.0	0.0
				Wind +X ecc.-	0.2	-1.5	0.0	-1.1	0.0	-0.0	0.2	1.3	-0.0	-1.1	0.0	-0.0
				Wind -X ecc.+	-0.1	1.3	0.0	1.0	0.0	-0.0	-0.1	-1.2	-0.0	1.0	0.0	-0.0
				Wind -X ecc.-	-0.2	1.5	-0.0	1.1	-0.0	0.0	-0.2	-1.3	0.0	1.1	-0.0	0.0
				Wind +Y ecc.+	-2.4	-0.3	-1.3	-0.2	-0.9	-0.0	-2.4	0.2	0.9	-0.2	-0.9	-0.0
				Wind +Y ecc.-	-2.6	0.4	-1.4	0.3	-0.9	0.0	-2.6	-0.4	0.9	0.3	-0.9	0.0
				Wind -Y ecc.+	2.4	0.3	1.3	0.2	0.9	0.0	2.4	-0.2	-0.9	0.2	0.9	0.0
				Wind -Y ecc.-	2.6	-0.4	1.4	-0.3	0.9	-0.0	2.6	0.4	-0.9	-0.3	0.9	-0.0
				Earthquake X Mode 1	-0.1	-6.1	-0.6	-4.6	-0.3	-0.0	-0.1	5.4	0.3	-4.6	-0.3	-0.0
				Earthquake X Mode 2	-4.6	11.9	-1.6	9.0	-1.0	-0.0	-4.6	-10.7	1.0	9.0	-1.0	-0.0
				Earthquake X Mode 3	-2.5	-0.1	-1.1	-0.1	-0.7	0.0	-2.5	0.1	0.7	-0.1	-0.7	0.0
				Earthquake X Mode 4	-0.1	-0.7	0.0	-0.5	0.0	-0.0	-0.1	0.6	-0.0	-0.5	0.0	-0.0
				Earthquake X Mode 5	0.1	1.5	-0.1	1.2	-0.1	-0.0	0.1	-1.4	0.1	1.2	-0.1	-0.0
				Earthquake X Mode 6	0.1	-0.0	-0.1	-0.0	-0.1	0.0	0.1	0.0	0.1	-0.0	-0.1	0.0
				Earthquake X Mode 7	0.0	-0.2	0.0	-0.1	0.0	-0.0	0.0	0.2	-0.0	-0.1	0.0	-0.0
				Earthquake X Mode 8	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	-0.1	-0.1	0.0
				Earthquake X Mode 9	0.0	-0.4	0.1	-0.3	0.1	0.0	0.0	0.4	-0.1	-0.3	0.1	0.0
				Earthquake Y Mode 1	-0.1	-2.8	-0.3	-2.1	-0.2	-0.0	-0.1	2.5	0.1	-2.1	-0.2	-0.0
				Earthquake Y Mode 2	-1.4	3.7	-0.5	2.8	-0.3	-0.0	-1.4	-3.3	0.3	2.8	-0.3	-0.0
				Earthquake Y Mode 3	-15.4	-0.7	-6.6	-0.4	-4.3	0.0	-15.4	0.4	4.3	-0.4	-4.3	0.0
				Earthquake Y Mode 4	-0.0	-0.1	0.0	-0.1	0.0	-0.0	-0.0	0.1	-0.0	-0.1	0.0	-0.0
				Earthquake Y Mode 5	0.0	0.3	-0.0	0.2	-0.0	-0.0	0.0	-0.3	0.0	0.2	-0.0	-0.0
				Earthquake Y Mode 6	1.0	-0.2	-1.0	-0.1	-0.7	0.0	1.0	0.1	0.7	-0.1	-0.7	0.0
				Earthquake Y Mode 7	0.0	-0.1	0.0	-0.0	0.0	-0.0	0.0	0.1	-0.0	-0.0	0.0	-0.0
				Earthquake Y Mode 8	0.0	-0.2	-0.3	-0.2	-0.2	0.0	0.0	0.2	0.2	-0.2	-0.2	0.0
				Earthquake Y Mode 9	0.0	-0.2	0.0	-0.1	0.0	0.0	0.0	0.2	-0.0	-0.1	0.0	0.0
C12	techo	50x50	12.00/14.40	Self weight	240.3	-10.2	-75.4	-7.0	-52.9	0.0	225.6	6.6	51.5	-7.0	-52.9	0.0
				Dead load	49.6	-0.2	-5.0	-0.8	-1.8	-0.0	49.6	1.8	-0.7	-0.8	-1.8	-0.0
				Live load	48.1	-4.8	-32.2	-3.3	-19.5	0.0	48.1	3.0	14.6	-3.3	-19.5	0.0
				Wind +X ecc.+	-0.9	-1.2	-0.2	-0.8	-0.1	0.0	-0.9	0.9	0.1	-0.8	-0.1	0.0
				Wind +X ecc.-	-1.0	-1.3	-0.3	-0.9	-0.2	-0.0	-1.0	1.0	0.2	-0.9	-0.2	-0.0
				Wind -X ecc.+	0.9	1.2	0.2	0.8	0.1	-0.0	0.9	-0.9	-0.1	0.8	0.1	-0.0
				Wind -X ecc.-	1.0	1.3	0.3	0.9	0.2	0.0	1.0	-1.0	-0.2	0.9	0.2	0.0
				Wind +Y ecc.+	-0.8	-0.6	-2.8	-0.5	-2.0	-0.0	-0.8	0.4	2.0	-0.5	-2.0	-0.0
				Wind +Y ecc.-	-0.3	-0.0	-2.1	-0.0	-1.5	0.0	-0.3	0.0	1.4	-0.0	-1.5	0.0
				Wind -Y ecc.+	0.8	0.6	2.8	0.5	2.0	0.0	0.8	-0.4	-2.0	0.5	2.0	0.0
				Wind -Y ecc.-	0.3	0.0	2.1	0.0	1.5	-0.0	0.3	-0.0	-1.4	0.0	1.5	-0.0
				Earthquake X Mode 1	-6.1	-7.6	-6.4	-5.4	-4.4	-0.1	-6.1	5.4	4.2	-5.4	-4.4	-0.1
				Earthquake X Mode 2	10.0	14.4	-5.1	10.3	-3.7	-0.1	10.0	-10.2	3.7	10.3	-3.7	-0.1
				Earthquake X Mode 3	-0.7	-0.5	-2.4	-0.4	-1.7	0.0	-0.7	0.3	1.6	-0.4	-1.7	0.0
				Earthquake X Mode 4	1.2	1.8	1.0	1.2	0.7	0.0	1.2	-1.1	-0.6	1.2	0.7	0.0
				Earthquake X Mode 5	-2.3	-3.9	1.1	-2.6	0.7	0.0	-2.3	2.4	-0.6	-2.6	0.7	0.0
				Earthquake X Mode 6	0.1	0.1	0.6	0.1	0.4	-0.0	0.1	-0.1	-0.3	0.1	0.4	-0.0
				Earthquake X Mode 7	-0.3	-0.5	-0.1	-0.3	-0.1	-0.0	-0.3	0.3	0.0	-0.3	-0.1	-0.0
				Earthquake X Mode 8	-0.2	-0.3	-0.7	-0.2	-0.4	-0.0	-0.2	0.1	0.3	-0.2	-0.4	-0.0
				Earthquake X Mode 9	-0.6	-1.3	0.7	-0.8	0.4	0.0	-0.6	0.6	-0.3	-0.8	0.4	0.0
				Earthquake Y Mode 1	-2.8	-3.4	-2.9	-2.5	-2.0	-0.0	-2.8	2.4	1.9	-2.5	-2.0	-0.0
				Earthquake Y Mode 2	3.1	4.4	-1.6	3.2	-1.1	-0.0	3.1	-3.2	1.1	3.2	-1.1	-0.0
				Earthquake Y Mode 3	-4.3	-3.2	-14.6	-2.2	-10.2	0.0	-4.3	2.1	9.9	-2.2	-10.2	0.0
				Earthquake Y Mode 4	0.2	0.4	0.2	0.2	0.1	0.0	0.2	-0.2</				



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 4	50x50	9.00/11.40	Self weight	450.9	-9.4	-68.3	-8.0	-56.6	0.0	0.0	436.1	9.9	67.5	-8.0	-56.6	0.0
				Dead load	94.5	3.5	-11.6	3.0	-10.1	-0.0	94.5	-3.8	12.7	3.0	-10.1	-0.0
				Live load	161.4	-4.8	-43.1	-4.1	-36.7	0.0	161.4	5.0	45.1	-4.1	-36.7	0.0
				Wind +X ecc.+	-2.0	-1.9	-0.2	-1.7	-0.2	0.0	-2.0	2.3	0.2	-1.7	-0.2	0.0
				Wind +X ecc.-	-2.3	-2.1	-0.5	-1.9	-0.4	-0.0	-2.3	2.5	0.5	-1.9	-0.4	-0.0
				Wind -X ecc.+	2.0	1.9	0.2	1.7	0.2	-0.0	2.0	-2.3	-0.2	1.7	0.2	-0.0
				Wind -X ecc.-	2.3	2.1	0.5	1.9	0.4	0.0	2.3	-2.5	-0.5	1.9	0.4	0.0
				Wind +Y ecc.+	-2.7	-0.9	-5.0	-0.8	-4.5	-0.0	-2.7	1.0	5.8	-0.8	-4.5	-0.0
				Wind +Y ecc.-	-1.4	0.1	-3.7	0.1	-3.3	0.0	-1.4	-0.2	4.3	0.1	-3.3	0.0
				Wind -Y ecc.+	2.7	0.9	5.0	0.8	4.5	0.0	2.7	-1.0	-5.8	0.8	4.5	0.0
				Wind -Y ecc.-	1.4	-0.1	3.7	-0.1	3.3	-0.0	1.4	0.2	-4.3	-0.1	3.3	-0.0
				Earthquake X Mode 1	-15.1	-11.9	-10.3	-10.5	-9.1	-0.1	-15.1	13.4	11.5	-10.5	-9.1	-0.1
				Earthquake X Mode 2	19.7	22.5	-9.5	19.9	-8.5	-0.1	19.7	-25.4	11.0	19.9	-8.5	-0.1
				Earthquake X Mode 3	-2.3	-0.7	-4.0	-0.6	-3.6	0.0	-2.3	0.7	4.6	-0.6	-3.6	0.0
				Earthquake X Mode 4	2.5	2.0	1.1	1.5	0.9	0.0	2.5	-1.6	-0.9	1.5	0.9	0.0
				Earthquake X Mode 5	-4.1	-4.1	1.2	-3.0	0.9	0.0	-4.1	3.2	-0.9	-3.0	0.9	0.0
				Earthquake X Mode 6	0.4	0.1	0.7	0.1	0.5	-0.0	0.4	-0.1	-0.6	0.1	0.5	-0.0
				Earthquake X Mode 7	-0.3	-0.0	0.0	0.0	0.0	0.0	-0.3	-0.2	-0.0	0.0	0.0	0.0
				Earthquake X Mode 8	-0.3	-0.0	-0.1	0.0	0.0	0.0	-0.3	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	-0.7	-0.1	0.0	0.2	-0.1	-0.0	-0.7	-0.5	0.2	0.2	-0.1	-0.0
				Earthquake Y Mode 1	-6.9	-5.4	-4.7	-4.8	-4.1	-0.1	-6.9	6.1	5.2	-4.8	-4.1	-0.1
				Earthquake Y Mode 2	6.1	6.9	-2.9	6.2	-2.6	-0.0	6.1	-7.8	3.4	6.2	-2.6	-0.0
				Earthquake Y Mode 3	-14.1	-4.2	-24.9	-3.6	-22.2	0.1	-14.1	4.5	28.3	-3.6	-22.2	0.1
				Earthquake Y Mode 4	0.5	0.4	0.2	0.3	0.2	0.0	0.5	-0.3	-0.2	0.3	0.2	0.0
				Earthquake Y Mode 5	-0.8	-0.8	0.2	-0.6	0.2	0.0	-0.8	0.6	-0.2	-0.6	0.2	0.0
				Earthquake Y Mode 6	3.0	0.7	5.6	0.5	4.3	-0.0	3.0	-0.5	-4.6	0.5	4.3	-0.0
				Earthquake Y Mode 7	-0.1	-0.0	0.0	0.0	0.0	0.0	-0.1	-0.0	-0.0	0.0	0.0	0.0
				Earthquake Y Mode 8	-0.8	-0.0	-0.2	0.1	0.1	0.0	-0.8	-0.2	-0.4	0.1	0.1	0.0
				Earthquake Y Mode 9	-0.2	-0.0	0.0	0.1	-0.0	-0.0	-0.2	-0.2	0.1	0.1	-0.0	-0.0
Floor 3	50x50	6.00/8.40	Self weight	665.0	-7.9	-66.7	-6.8	-56.5	0.0	0.0	650.3	8.5	68.8	-6.8	-56.5	0.0
				Dead load	138.6	3.1	-9.7	2.5	-8.0	-0.0	138.6	-3.0	9.6	2.5	-8.0	-0.0
				Live load	274.0	-4.1	-39.5	-3.5	-33.1	0.0	274.0	4.4	40.1	-3.5	-33.1	0.0
				Wind +X ecc.+	-3.4	-2.6	-0.2	-2.3	-0.2	0.0	-3.4	2.8	0.2	-2.3	-0.2	0.0
				Wind +X ecc.-	-4.0	-2.9	-0.6	-2.5	-0.5	-0.0	-4.0	3.2	0.6	-2.5	-0.5	-0.0
				Wind -X ecc.+	3.4	2.6	0.2	2.3	0.2	-0.0	3.4	-2.8	-0.2	2.3	0.2	-0.0
				Wind -X ecc.-	4.0	2.9	0.6	2.5	0.5	0.0	4.0	-3.2	-0.6	2.5	0.5	0.0
				Wind +Y ecc.+	-5.3	-1.1	-6.7	-0.9	-5.8	-0.0	-5.3	1.1	7.2	-0.9	-5.8	-0.0
				Wind +Y ecc.-	-2.8	0.2	-4.9	0.2	-4.3	0.0	-2.8	-0.3	5.4	0.2	-4.3	0.0
				Wind -Y ecc.+	5.3	1.1	6.7	0.9	5.8	0.0	5.3	-1.1	-7.2	0.9	5.8	0.0
				Wind -Y ecc.-	2.8	-0.2	4.9	-0.2	4.3	-0.0	2.8	0.3	-5.4	-0.2	4.3	-0.0
				Earthquake X Mode 1	-26.2	-15.0	-12.4	-12.8	-10.4	-0.2	-26.2	15.7	12.7	-12.8	-10.4	-0.2
				Earthquake X Mode 2	31.1	28.4	-12.3	24.1	-10.4	-0.1	31.1	-29.4	12.7	24.1	-10.4	-0.1
				Earthquake X Mode 3	-4.3	-0.8	-5.0	-0.6	-4.3	0.0	-4.3	0.7	5.3	-0.6	-4.3	0.0
				Earthquake X Mode 4	3.1	0.8	0.4	0.4	0.2	0.0	3.1	-0.1	-0.0	0.4	0.2	0.0
				Earthquake X Mode 5	-5.0	-1.4	0.4	-0.6	0.1	0.0	-5.0	-0.1	0.2	-0.6	0.1	0.0
				Earthquake X Mode 6	0.5	0.0	0.3	0.0	0.1	-0.0	0.5	0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 7	-0.2	0.5	0.1	0.4	0.1	0.0	-0.2	-0.5	-0.1	0.4	0.1	0.0
				Earthquake X Mode 8	-0.1	0.3	0.7	0.2	0.6	0.0	-0.1	-0.2	-0.6	0.2	0.6	0.0
				Earthquake X Mode 9	-0.3	1.3	-0.7	1.0	-0.6	-0.0	-0.3	-1.2	0.6	1.0	-0.6	-0.0
				Earthquake Y Mode 1	-11.9	-6.8	-5.6	-5.8	-4.7	-0.1	-11.9	7.1	5.8	-5.8	-4.7	-0.1
				Earthquake Y Mode 2	9.6	8.8	-3.8	7.4	-3.2	-0.0	9.6	-9.1	3.9	7.4	-3.2	-0.0
				Earthquake Y Mode 3	-26.4	-4.6	-31.0	-3.8	-26.4	0.1	-26.4	4.6	32.4	-3.8	-26.4	0.1
				Earthquake Y Mode 4	0.6	0.2	0.1	0.1	0.0	0.0	0.6	-0.0	-0.0	0.1	0.0	0.0
				Earthquake Y Mode 5	-0.9	-0.3	0.1	-0.1	0.0	0.0	-0.9	-0.0	0.0	-0.1	0.0	0.0
				Earthquake Y Mode 6	4.0	0.2	2.2	0.1	1.1	-0.0	4.0	0.0	-0.4	0.1	1.1	-0.0
				Earthquake Y Mode 7	-0.0	0.2	0.0	0.1	0.0	0.0	-0.0	-0.1	-0.0	0.1	0.0	0.0
				Earthquake Y Mode 8	-0.3	0.7	1.7	0.5	1.4	0.0	-0.3	-0.6	-1.6	0.5	1.4	0.0
				Earthquake Y Mode 9	-0.1	0.5	-0.3	0.4	-0.2	-0.0	-0.1	-0.4	0.2	0.4	-0.2	-0.0
Floor 2	50x50	3.00/5.40	Self weight	881.0	-5.9	-70.5	-5.2	-57.4	0.0	0.0	866.3	6.5	67.3	-5.2	-57.4	0.0
				Dead load	183.1	4.0	-10.3	3.2	-8.4	0.0	183.1	-3.7	9.9	3.2	-8.4	0.0
				Live load	387.6	-3.1	-42.8	-2.7	-34.8	0.0	387.6	3.5	40.8	-2.7	-34.8	0.0
				Wind +X ecc.+	-5.1	-3.2	-0.2	-2.6	-0.1	0.0	-5.1	3.0	0.2	-2.6	-0.1	0.0
				Wind +X ecc.-	-5.9	-3.6	-0.6	-2.9	-0.5	-0.0	-5.9	3.4	0.6	-2.9	-0.5	-0.0
				Wind -X ecc.+	5.1	3.2	0.2	2.6	0.1	-0.0	5.1	-3.0	-0.2	2.6	0.1	-0.0
				Wind -X ecc.-	5.9	3.6	0.6	2.9	0.5	0.0	5.9	-3.4	-0.6	2.9	0.5	0.0
				Wind +Y ecc.+	-8.2	-1.2	-8.3	-1.0	-6.7	-0.0	-8.2	1.1	7.9	-1.0	-6.7	-0.0
				Wind +Y ecc.-	-4.5	0.5	-6.2	0.4	-5.1	0.0	-4.5	-0.5	6.0	0.4	-5.1	0.0
				Wind -Y ecc.+	8.2	1.2	8.3	1.0	6.7	0.0	8.2	-1.1	-7.9	1.0	6.7	0.0
				Wind -Y ecc.-	4.5	-0.5	6.2	-0.4	5.1	-0.0	4.5	0.5	-6.0	-0.4	5.1	-0.0
				Earthquake X Mode 1	-38.2	-16.8	-13.2	-13.4	-10.5	-0.2	-38.2	15.4	11.9	-13.4	-10.5	-0.2
				Earthquake X Mode 2	43.4	31.7	-14.2	25.1	-11.1	-0.1	43.4	-28.5	12.5	25.1	-11.1	-0.1
				Earthquake X Mode 3	-6.4	-0.7	-5.7	-0.5	-4.6	0.0	-6.4	0.6	5.3	-0.5	-4.6	0.0
				Earthquake X Mode 4	2.8	-1.0	-0.6	-0.9	-0.5	-0.0	2.8	1.3	0.7	-0.9	-0.5	-0.0
				Earthquake X Mode 5	-4.4	2.2	-0.8	2.1	-0.8	-0.0	-4.4	-2.9	1.0	2.1	-0.8	-0.0
				Earthquake X Mode 6	0.4	-0.0	-0.3	-0.0	-0.3	0.0	0.4	0.0	0.4	-0.0	-0.3	0.0
				Earthquake X Mode 7	-0.1	0.2	-0.0	0.0	-0.0	0.0	-0.1	0.0	0.0	0.0	-0.0	0.0
				Earthquake X Mode 8	0.0	0.1	0.2	0.0	0.1	-0.0	0.0	0.0	0.0	0.0	0.1	-0.0
				Earthquake X Mode 9	-0.2	0.3	-0.2	0.1	-0.0	-0.0	-0.2	0.1	-0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-17.4	-7.6	-6.0	-6.1	-4.8	-0.1	-17.4	7.0	5.4	-6.1	-4.8	-0.1
				Earthquake Y Mode 2	13.4	9.8	-4.4	7.7	-3.4	-0.0	13.4	-8.8	3.9	7.7		



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	50x50	0.00/2.40	Self weight	1105.0	-2.3	-34.4	-2.4	-38.0	0.0	1090.3	3.6	56.7	-2.4	-38.0	0.0
				Dead load	228.7	2.0	-5.0	2.3	-5.4	0.0	228.7	-3.4	8.0	2.3	-5.4	0.0
				Live load	505.2	-1.2	-20.9	-1.3	-23.0	0.0	505.2	1.9	34.4	-1.3	-23.0	0.0
				Wind +X ecc.+	-6.6	-3.2	-0.1	-2.1	-0.1	0.0	-6.6	1.8	0.1	-2.1	-0.1	0.0
				Wind +X ecc.-	-7.7	-3.5	-0.4	-2.3	-0.3	-0.0	-7.7	2.1	0.3	-2.3	-0.3	-0.0
				Wind -X ecc.+	6.6	3.2	0.1	2.1	0.1	-0.0	6.6	-1.8	-0.1	2.1	0.1	-0.0
				Wind -X ecc.-	7.7	3.5	0.4	2.3	0.3	0.0	7.7	-2.1	-0.3	2.3	0.3	0.0
				Wind +Y ecc.+	-10.7	-0.9	-8.2	-0.6	-5.5	-0.0	-10.7	0.6	5.0	-0.6	-5.5	-0.0
				Wind +Y ecc.-	-5.9	0.8	-6.6	0.6	-4.5	0.0	-5.9	-0.5	4.2	0.6	-4.5	0.0
				Wind -Y ecc.+	10.7	0.9	8.2	0.6	5.5	0.0	10.7	-0.6	-5.0	0.6	5.5	0.0
				Wind -Y ecc.-	5.9	-0.8	6.6	-0.6	4.5	-0.0	5.9	0.5	-4.2	-0.6	4.5	-0.0
				Earthquake X Mode 1	-47.8	-14.5	-9.8	-9.6	-6.5	-0.1	-47.8	8.5	5.8	-9.6	-6.5	-0.1
				Earthquake X Mode 2	53.7	27.5	-12.6	17.8	-8.0	-0.1	53.7	-15.2	6.6	17.8	-8.0	-0.1
				Earthquake X Mode 3	-8.1	-0.3	-5.3	-0.2	-3.5	0.0	-8.1	0.2	3.2	-0.2	-3.5	0.0
				Earthquake X Mode 4	2.0	-1.8	-0.9	-1.3	-0.6	-0.0	2.0	1.2	0.6	-1.3	-0.6	-0.0
				Earthquake X Mode 5	-3.2	3.8	-1.3	2.7	-0.9	-0.0	-3.2	-2.5	0.8	2.7	-0.9	-0.0
				Earthquake X Mode 6	0.3	-0.0	-0.6	-0.0	-0.4	0.0	0.3	0.0	0.4	-0.0	-0.4	0.0
				Earthquake X Mode 7	-0.2	-0.5	-0.1	-0.4	-0.1	-0.0	-0.2	0.4	0.1	-0.4	-0.1	-0.0
				Earthquake X Mode 8	-0.1	-0.2	-0.6	-0.2	-0.5	0.0	-0.1	0.2	0.5	-0.2	-0.5	0.0
				Earthquake X Mode 9	-0.4	-1.2	0.6	-0.9	0.5	0.0	-0.4	0.9	-0.5	-0.9	0.5	0.0
				Earthquake Y Mode 1	-21.7	-6.6	-4.4	-4.4	-3.0	-0.0	-21.7	3.8	2.6	-4.4	-3.0	-0.0
				Earthquake Y Mode 2	16.6	8.5	-3.9	5.5	-2.5	-0.0	16.6	-4.7	2.0	5.5	-2.5	-0.0
				Earthquake Y Mode 3	-49.7	-2.0	-32.4	-1.3	-21.7	0.1	-49.7	1.1	19.8	-1.3	-21.7	0.1
				Earthquake Y Mode 4	0.4	-0.3	-0.2	-0.2	-0.1	-0.0	0.4	0.2	0.1	-0.2	-0.1	-0.0
				Earthquake Y Mode 5	-0.6	0.7	-0.2	0.5	-0.2	-0.0	-0.6	-0.5	0.1	0.5	-0.2	-0.0
				Earthquake Y Mode 6	2.4	-0.4	-5.1	-0.3	-3.6	0.0	2.4	0.2	3.6	-0.3	-3.6	0.0
				Earthquake Y Mode 7	-0.1	-0.1	-0.0	-0.1	-0.0	-0.0	-0.1	0.1	0.0	-0.1	-0.0	-0.0
				Earthquake Y Mode 8	-0.3	-0.6	-1.6	-0.4	-1.2	0.0	-0.3	0.5	1.3	-0.4	-1.2	0.0
				Earthquake Y Mode 9	-0.2	-0.4	0.2	-0.3	0.2	0.0	-0.2	0.3	-0.2	-0.3	0.2	0.0
C13	techo	50x50	12.00/14.40	Self weight	183.7	-1.4	-33.6	-1.0	-23.6	0.0	169.0	1.0	23.1	-1.0	-23.6	0.0
				Dead load	75.1	-0.4	6.7	-0.1	7.8	-0.0	75.1	-0.3	-12.1	-0.1	7.8	-0.0
				Live load	31.3	-0.6	-14.3	-0.3	-8.6	0.0	31.3	0.2	6.3	-0.3	-8.6	0.0
				Wind +X ecc.+	0.4	-1.6	0.0	-1.1	-0.0	0.0	0.4	1.1	0.0	-1.1	-0.0	0.0
				Wind +X ecc.-	0.4	-1.7	-0.2	-1.2	-0.2	-0.0	0.4	1.1	0.2	-1.2	-0.2	-0.0
				Wind -X ecc.+	-0.4	1.6	-0.0	1.1	0.0	-0.0	-0.4	-1.1	-0.0	1.1	0.0	-0.0
				Wind -X ecc.-	-0.4	1.7	0.2	1.2	0.2	0.0	-0.4	-1.1	-0.2	1.2	0.2	0.0
				Wind +Y ecc.+	-0.2	-0.1	-2.3	-0.1	-1.7	-0.0	-0.2	0.1	1.8	-0.1	-1.7	-0.0
				Wind +Y ecc.-	-0.3	0.4	-1.2	0.3	-0.9	0.0	-0.3	-0.2	1.0	0.3	-0.9	0.0
				Wind -Y ecc.+	0.2	0.1	2.3	0.1	1.7	0.0	0.2	-0.1	-1.8	0.1	1.7	0.0
				Wind -Y ecc.-	0.3	-0.4	1.2	-0.3	0.9	-0.0	0.3	0.2	-1.0	-0.3	0.9	-0.0
				Earthquake X Mode 1	2.1	-8.0	-7.0	-5.6	-5.3	-0.1	2.1	5.3	5.6	-5.6	-5.3	-0.1
				Earthquake X Mode 2	-6.6	21.6	-7.5	14.8	-5.3	-0.1	-6.6	-14.0	5.2	14.8	-5.3	-0.1
				Earthquake X Mode 3	-0.1	-0.3	-1.3	-0.2	-1.0	0.0	-0.1	0.2	1.0	-0.2	-1.0	0.0
				Earthquake X Mode 4	-1.2	2.1	1.9	1.4	1.3	0.0	-1.2	-1.2	-1.1	1.4	1.3	0.0
				Earthquake X Mode 5	2.1	-5.2	2.0	-3.4	1.3	0.0	2.1	3.0	-1.1	-3.4	1.3	0.0
				Earthquake X Mode 6	-0.0	0.1	0.4	0.0	0.3	-0.0	-0.0	-0.0	-0.2	0.0	0.3	-0.0
				Earthquake X Mode 7	0.4	-0.6	-0.6	-0.4	-0.3	-0.0	0.4	0.3	0.2	-0.4	-0.3	-0.0
				Earthquake X Mode 8	0.2	-0.3	-0.6	-0.2	-0.4	-0.0	0.2	0.1	0.3	-0.2	-0.4	-0.0
				Earthquake X Mode 9	0.6	-1.5	1.0	-0.9	0.6	0.0	0.6	0.7	-0.4	-0.9	0.6	0.0
				Earthquake Y Mode 1	1.0	-3.6	-3.2	-2.5	-2.4	-0.0	1.0	2.4	2.6	-2.5	-2.4	-0.0
				Earthquake Y Mode 2	-2.1	6.7	-2.3	4.6	-1.6	-0.0	-2.1	-4.3	1.6	4.6	-1.6	-0.0
				Earthquake Y Mode 3	-0.9	-1.7	-7.9	-1.2	-5.9	0.0	-0.9	1.1	6.2	-1.2	-5.9	0.0
				Earthquake Y Mode 4	-0.2	0.4	0.4	0.3	0.2	0.0	-0.2	-0.2	-0.2	0.3	0.2	0.0
				Earthquake Y Mode 5	0.4	-0.9	0.4	-0.6	0.2	0.0	0.4	0.5	-0.2	-0.6	0.2	0.0
				Earthquake Y Mode 6	-0.4	0.5	3.4	0.3	2.3	-0.0	-0.4	-0.3	-2.0	0.3	2.3	-0.0
				Earthquake Y Mode 7	0.1	-0.2	-0.2	-0.1	-0.1	-0.0	0.1	0.1	0.1	-0.1	-0.1	-0.0
				Earthquake Y Mode 8	0.5	-0.7	-1.5	-0.4	-0.9	-0.0	0.5	0.3	0.6	-0.4	-0.9	-0.0
				Earthquake Y Mode 9	0.2	-0.5	0.4	-0.3	0.2	0.0	0.2	0.3	-0.1	-0.3	0.2	0.0
	Floor 4	50x50	9.00/11.40	Self weight	359.7	-1.5	-30.5	-1.2	-25.2	0.0	345.0	1.5	30.0	-1.2	-25.2	0.0
				Dead load	92.1	-1.0	-6.7	-0.9	-6.4	-0.0	92.1	1.1	8.7	-0.9	-6.4	-0.0
				Live load	121.4	-1.2	-19.7	-1.0	-16.8	0.0	121.4	1.3	20.7	-1.0	-16.8	0.0
				Wind +X ecc.+	1.4	-2.6	0.1	-2.3	0.1	0.0	1.4	2.9	-0.1	-2.3	0.1	0.0
				Wind +X ecc.-	1.5	-2.8	-0.3	-2.5	-0.3	-0.0	1.5	3.1	0.5	-2.5	-0.3	-0.0
				Wind -X ecc.+	-1.4	2.6	-0.1	2.3	-0.1	-0.0	-1.4	-2.9	0.1	2.3	-0.1	-0.0
				Wind -X ecc.-	-1.5	2.8	0.3	2.5	0.3	0.0	-1.5	-3.1	-0.5	2.5	0.3	0.0
				Wind +Y ecc.+	0.1	-0.4	-4.3	-0.3	-4.0	-0.0	0.1	0.4	5.4	-0.3	-4.0	-0.0
				Wind +Y ecc.-	-0.5	0.5	-2.2	0.5	-2.1	0.0	-0.5	-0.6	2.7	0.5	-2.1	0.0
				Wind -Y ecc.+	-0.1	0.4	4.3	0.3	4.0	0.0	-0.1	-0.4	-5.4	0.3	4.0	0.0
				Wind -Y ecc.-	0.5	-0.5	2.2	-0.5	2.1	-0.0	0.5	0.6	-2.7	-0.5	2.1	-0.0
				Earthquake X Mode 1	8.4	-13.4	-12.7	-11.7	-11.7	-0.1	8.4	14.8	15.4	-11.7	-11.7	-0.1
				Earthquake X Mode 2	-18.7	32.1	-14.3	27.8	-13.0	-0.1	-18.7	-34.8	17.0	27.8	-13.0	-0.1
				Earthquake X Mode 3	0.1	-0.5	-2.3	-0.4	-2.1	0.0	0.1	0.5	2.8	-0.4	-2.1	0.0
				Earthquake X Mode 4	-2.6	2.3	2.2	1.7	1.6	0.0	-2.6	-1.9	-1.6	1.7	1.6	0.0
				Earthquake X Mode 5	4.5	-5.2	2.4	-4.0	1.7	0.0	4.5	4.5	-1.8	-4.0	1.7	0.0
				Earthquake X Mode 6	-0.1	0.1	0.5	0.0	0.4	-0.0	-0.1	-0.0	-0.4	0.0	0.4	-0.0
				Earthquake X Mode 7	0.5	-0.0	-0.1	0.0	0.1	0.0	0.5	-0.1	-0.2	0.0	0.1	0.0
				Earthquake X Mode 8	0.2	0.0	-0.1	0.0	0.1	0.0	0.2	-0.1	-0.2	0.0	0.1	0.0
				Earthquake X Mode 9	0.8	0.0	0.1	0.2	-0.1	-0.0	0.8	-0.4	0.4	0.2	-0.1	-0.0
				Earthquake Y Mode 1	3.8	-6.1	-5.8	-5.3	-5.3	-0.1	3.8	6.7	7.0	-5.3	-5.3	-0.1
				Earthquake Y Mode 2	-5.8	9.9	-4.4	8.6	-4.0	-0.0	-5.8	-10.7	5.2	8.6	-4.0	-0.0



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.40	Self weight	539.7	-1.5	-30.3	-1.3	-25.7	0.0	524.9	1.5	31.4	-1.3	-25.7	0.0	
				Dead load	110.6	-0.8	-3.8	-0.7	-3.0	-0.0	110.6	0.8	3.3	-0.7	-3.0	-0.0
				Live load	212.2	-1.1	-18.0	-0.9	-15.2	0.0	212.2	1.1	18.3	-0.9	-15.2	0.0
				Wind +X ecc.+	3.0	-3.4	0.1	-2.9	0.1	0.0	3.0	3.6	-0.1	-2.9	0.1	0.0
				Wind +X ecc.-	3.3	-3.7	-0.6	-3.2	-0.5	-0.0	3.3	3.9	0.6	-3.2	-0.5	-0.0
				Wind -X ecc.+	-3.0	3.4	-0.1	2.9	-0.1	-0.0	-3.0	-3.6	0.1	2.9	-0.1	-0.0
				Wind -X ecc.-	-3.3	3.7	0.6	3.2	0.5	0.0	-3.3	-3.9	-0.6	3.2	0.5	0.0
				Wind +Y ecc.+	0.9	-0.6	-6.1	-0.5	-5.4	-0.0	0.9	0.6	6.8	-0.5	-5.4	-0.0
				Wind +Y ecc.-	-0.6	0.7	-3.1	0.6	-2.7	0.0	-0.6	-0.8	3.4	0.6	-2.7	0.0
				Wind -Y ecc.+	-0.9	0.6	6.1	0.5	5.4	0.0	-0.9	-0.6	-6.8	0.5	5.4	0.0
				Wind -Y ecc.-	0.6	-0.7	3.1	-0.6	2.7	-0.0	0.6	0.8	-3.4	-0.6	2.7	-0.0
				Earthquake X Mode 1	18.3	-17.2	-17.1	-14.5	-14.6	-0.2	18.3	17.6	18.0	-14.5	-14.6	-0.2
				Earthquake X Mode 2	-34.7	38.6	-17.9	32.5	-15.2	-0.1	-34.7	-39.4	18.5	32.5	-15.2	-0.1
				Earthquake X Mode 3	0.5	-0.6	-3.0	-0.5	-2.6	0.0	0.5	0.6	3.2	-0.5	-2.6	0.0
				Earthquake X Mode 4	-3.2	0.8	0.9	0.4	0.3	0.0	-3.2	-0.2	0.2	0.4	0.3	0.0
				Earthquake X Mode 5	5.4	-1.6	0.8	-0.8	0.3	0.0	5.4	0.4	0.2	-0.8	0.3	0.0
				Earthquake X Mode 6	-0.1	0.0	0.2	-0.0	0.1	-0.0	-0.1	0.0	0.0	-0.0	0.1	-0.0
				Earthquake X Mode 7	0.1	0.6	0.6	0.5	0.4	0.0	0.1	-0.6	-0.5	0.5	0.4	0.0
				Earthquake X Mode 8	0.0	0.3	0.6	0.2	0.5	0.0	0.0	-0.3	-0.6	0.2	0.5	0.0
				Earthquake X Mode 9	0.2	1.5	-1.0	1.2	-0.8	-0.0	0.2	-1.4	0.9	1.2	-0.8	-0.0
				Earthquake Y Mode 1	8.3	-7.8	-7.7	-6.6	-6.6	-0.1	8.3	8.0	8.2	-6.6	-6.6	-0.1
				Earthquake Y Mode 2	-10.7	11.9	-5.5	10.0	-4.7	-0.0	-10.7	-12.2	5.7	10.0	-4.7	-0.0
				Earthquake Y Mode 3	3.2	-3.6	-18.6	-3.0	-15.9	0.1	3.2	3.5	19.6	-3.0	-15.9	0.1
				Earthquake Y Mode 4	-0.6	0.1	0.2	0.1	0.1	0.0	-0.6	-0.0	0.0	0.1	0.1	0.0
				Earthquake Y Mode 5	1.0	-0.3	0.2	-0.2	0.0	0.0	1.0	0.1	0.0	-0.2	0.0	0.0
				Earthquake Y Mode 6	-1.1	0.0	1.7	-0.1	0.6	-0.0	-1.1	0.2	0.2	-0.1	0.6	-0.0
				Earthquake Y Mode 7	0.0	0.2	0.2	0.1	0.1	0.0	0.0	-0.2	-0.1	0.1	0.1	0.0
				Earthquake Y Mode 8	0.1	0.7	1.5	0.6	1.2	0.0	0.1	-0.7	-1.4	0.6	1.2	0.0
				Earthquake Y Mode 9	0.1	0.5	-0.4	0.4	-0.3	-0.0	0.1	-0.5	0.3	0.4	-0.3	-0.0
Floor 2	50x50	3.00/5.40	Self weight	724.3	-1.7	-33.0	-1.4	-26.8	0.0	709.6	1.6	31.3	-1.4	-26.8	0.0	
				Dead load	129.7	-0.7	-4.7	-0.6	-3.8	0.0	129.7	0.7	4.4	-0.6	-3.8	0.0
				Live load	305.1	-1.3	-20.1	-1.1	-16.3	0.0	305.1	1.2	19.1	-1.1	-16.3	0.0
				Wind +X ecc.+	5.0	-4.1	0.1	-3.3	0.1	0.0	5.0	3.9	-0.1	-3.3	0.1	0.0
				Wind +X ecc.-	5.6	-4.5	-0.8	-3.6	-0.6	-0.0	5.6	4.2	0.7	-3.6	-0.6	-0.0
				Wind -X ecc.+	-5.0	4.1	-0.1	3.3	-0.1	-0.0	-5.0	-3.9	0.1	3.3	-0.1	-0.0
				Wind -X ecc.-	-5.6	4.5	0.8	3.6	0.6	0.0	-5.6	-4.2	-0.7	3.6	0.6	0.0
				Wind +Y ecc.+	2.2	-0.8	-8.0	-0.7	-6.4	-0.0	2.2	0.7	7.3	-0.7	-6.4	-0.0
				Wind +Y ecc.-	-0.8	0.9	-3.9	0.8	-3.2	0.0	-0.8	-1.0	3.6	0.8	-3.2	0.0
				Wind -Y ecc.+	-2.2	0.8	8.0	0.7	6.4	0.0	-2.2	-0.7	-7.3	0.7	6.4	0.0
				Wind -Y ecc.-	0.8	-0.9	3.9	-0.8	3.2	-0.0	0.8	1.0	-3.6	-0.8	3.2	-0.0
				Earthquake X Mode 1	30.7	-19.3	-20.3	-15.5	-15.7	-0.2	30.7	17.8	17.4	-15.5	-15.7	-0.2
				Earthquake X Mode 2	-53.0	41.2	-20.9	33.2	-16.2	-0.1	-53.0	-38.5	18.1	33.2	-16.2	-0.1
				Earthquake X Mode 3	1.1	-0.6	-3.5	-0.4	-2.8	0.0	1.1	0.5	3.1	-0.4	-2.8	0.0
				Earthquake X Mode 4	-2.4	-1.2	-1.1	-1.1	-1.2	-0.0	-2.4	1.5	1.7	-1.1	-1.2	-0.0
				Earthquake X Mode 5	4.3	2.8	-1.3	2.6	-1.3	-0.0	4.3	-3.4	1.8	2.6	-1.3	-0.0
				Earthquake X Mode 6	-0.1	-0.1	-0.2	-0.0	-0.3	0.0	-0.1	0.1	0.4	-0.0	-0.3	0.0
				Earthquake X Mode 7	-0.1	0.1	0.2	0.1	0.0	0.0	-0.1	0.0	0.1	0.1	0.0	0.0
				Earthquake X Mode 8	-0.1	0.1	0.2	0.0	0.0	-0.0	-0.1	0.0	0.1	0.0	0.0	-0.0
				Earthquake X Mode 9	-0.1	0.3	-0.3	0.1	-0.1	-0.0	-0.1	0.1	-0.2	0.1	-0.1	-0.0
				Earthquake Y Mode 1	13.9	-8.7	-9.2	-7.0	-7.1	-0.1	13.9	8.1	7.9	-7.0	-7.1	-0.1
				Earthquake Y Mode 2	-16.4	12.7	-6.4	10.3	-5.0	-0.0	-16.4	-11.9	5.6	10.3	-5.0	-0.0
				Earthquake Y Mode 3	6.9	-3.6	-21.8	-2.7	-17.0	0.1	6.9	2.9	19.0	-2.7	-17.0	0.1
				Earthquake Y Mode 4	-0.5	-0.2	-0.2	-0.2	-0.2	-0.0	-0.5	0.3	0.3	-0.2	-0.2	-0.0
				Earthquake Y Mode 5	0.8	0.5	-0.2	0.5	-0.2	-0.0	0.8	-0.6	0.3	0.5	-0.2	-0.0
				Earthquake Y Mode 6	-0.5	-0.4	-2.0	-0.4	-2.1	0.0	-0.5	0.5	3.0	-0.4	-2.1	0.0
				Earthquake Y Mode 7	-0.0	0.0	0.1	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0
				Earthquake Y Mode 8	-0.2	0.1	0.5	0.0	0.1	-0.0	-0.2	0.1	0.2	0.0	0.1	-0.0
				Earthquake Y Mode 9	-0.0	0.1	-0.1	0.0	-0.0	-0.0	-0.0	0.0	-0.1	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.40	Self weight	917.0	-0.9	-16.6	-1.0	-18.3	0.0	902.3	1.4	27.3	-1.0	-18.3	0.0	
				Dead load	149.5	-0.3	-2.3	-0.3	-2.4	0.0	149.5	0.5	3.5	-0.3	-2.4	0.0
				Live load	401.6	-0.7	-10.0	-0.7	-11.1	0.0	401.6	1.1	16.6	-0.7	-11.1	0.0
				Wind +X ecc.+	6.9	-3.5	0.1	-2.5	0.1	0.0	6.9	2.5	-0.1	-2.5	0.1	0.0
				Wind +X ecc.-	7.9	-3.9	-0.9	-2.8	-0.5	-0.0	7.9	2.7	0.4	-2.8	-0.5	-0.0
				Wind -X ecc.+	-6.9	3.5	-0.1	2.5	-0.1	-0.0	-6.9	-2.5	0.1	2.5	-0.1	-0.0
				Wind -X ecc.-	-7.9	3.9	0.9	2.8	0.5	0.0	-7.9	-2.7	-0.4	2.8	0.5	0.0
				Wind +Y ecc.+	3.6	-0.7	-8.8	-0.4	-5.4	-0.0	3.6	0.3	4.3	-0.4	-5.4	-0.0
				Wind +Y ecc.-	-0.9	1.0	-4.3	0.8	-2.7	0.0	-0.9	-0.8	2.2	0.8	-2.7	0.0
				Wind -Y ecc.+	-3.6	0.7	8.8	0.4	5.4	0.0	-3.6	-0.3	-4.3	0.4	5.4	0.0
				Wind -Y ecc.-	0.9	-1.0	4.3	-0.8	2.7	-0.0	0.9	0.8	-2.2	-0.8	2.7	-0.0
				Earthquake X Mode 1	42.1	-15.7	-19.6	-10.8	-11.7	-0.1	42.1	10.4	8.5	-10.8	-11.7	-0.1
				Earthquake X Mode 2	-68.4	31.5	-19.4	22.2	-11.9	-0.1	-68.4	-21.8	9.1	22.2	-11.9	-0.1
				Earthquake X Mode 3	1.6	-0.3	-3.4	-0.2	-2.1	0.0	1.6	0.1	1.6	-0.2	-2.1	0.0
				Earthquake X Mode 4	-1.0	-2.0	-2.3	-1.4	-1.5	-0.0	-1.0	1.5	1.4	-1.4	-1.5	-0.0
				Earthquake X Mode 5	2.3	4.3	-2.4	3.1	-1.6	-0.0	2.3	-3.2	1.5	3.1	-1.6	-0.0
				Earthquake X Mode 6	0.0	-0.0	-0.5	-0.0	-0.3	0.0	0.0	0.0	0.3	-0.0	-0.3	0.0
				Earthquake X Mode 7	0.2	-0.5	-0.5	-0.4	-0.4	-0.0	0.2	0.4	0.4	-0.4	-0.4	-0.0
				Earthquake X Mode 8	0.1	-0.2	-0.6	-0.2	-0.4	0.0	0.1	0.2	0.4	-0.2	-0.4	0.0
				Earthquake X Mode 9	0.3	-1.3	0.9	-1.0	0.7	0.0	0.3	1.1	-0.7	-1.0	0.7	0.0
				Earthquake Y Mode 1	19.1	-7.1	-8.9	-4.9	-5.3	-0.0	19.1	4.7	3.8	-4.9	-5.3	-0.0
				Earthquake Y Mode 2	-21.1	9.7	-6.0	6.9	-3.7	-0.0	-21.1	-6.7	2.8	6.9	-3.7	-0.0
				Earthquake Y Mode 3	10.0	-1.8	-21.0	-1.0	-12.9	0.1	10.0	0.7	10.0	-1.0	-12.9	0.1



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C14	techo	50x50	12.00/14.50	Self weight	99.5	-5.6	-23.4	-4.1	-16.5	0.0	84.2	4.7	17.9	-4.1	-16.5	0.0
				Dead load	0.9	0.1	-4.1	0.4	-2.1	-0.0	0.9	-0.9	1.2	0.4	-2.1	-0.0
				Live load	12.1	-2.3	-10.5	-1.2	-6.2	0.0	12.1	0.5	5.1	-1.2	-6.2	0.0
				Wind +X ecc.+	1.2	-0.6	0.6	-0.4	0.4	0.0	1.2	0.5	-0.3	-0.4	0.4	0.0
				Wind +X ecc.-	1.2	-0.5	0.3	-0.4	0.2	-0.0	1.2	0.5	-0.1	-0.4	0.2	-0.0
				Wind -X ecc.+	-1.2	0.6	-0.6	0.4	-0.4	-0.0	-1.2	-0.5	0.3	0.4	-0.4	-0.0
				Wind -X ecc.-	-1.2	0.5	-0.3	0.4	-0.2	0.0	-1.2	-0.5	0.1	0.4	-0.2	0.0
				Wind +Y ecc.+	-0.8	0.7	-1.8	0.4	-1.5	-0.0	-0.8	-0.2	1.9	0.4	-1.5	-0.0
				Wind +Y ecc.-	-0.5	0.4	-0.7	0.2	-0.6	0.0	-0.5	-0.2	0.7	0.2	-0.6	0.0
				Wind -Y ecc.+	0.8	-0.7	1.8	-0.4	1.5	0.0	0.8	0.2	-1.9	-0.4	1.5	0.0
				Wind -Y ecc.-	0.5	-0.4	0.7	-0.2	0.6	-0.0	0.5	0.2	-0.7	-0.2	0.6	-0.0
				Earthquake X Mode 1	2.1	-0.4	-5.4	-0.8	-4.7	-0.1	2.1	1.5	6.3	-0.8	-4.7	-0.1
				Earthquake X Mode 2	-20.1	11.0	-14.9	7.5	-10.4	-0.1	-20.1	-7.7	11.1	7.5	-10.4	-0.1
				Earthquake X Mode 3	-0.0	0.1	-0.4	0.1	-0.4	0.0	-0.0	-0.0	0.5	0.1	-0.4	0.0
				Earthquake X Mode 4	-0.8	0.6	1.8	0.4	1.2	0.0	-0.8	-0.4	-1.3	0.4	1.2	0.0
				Earthquake X Mode 5	6.4	-3.7	4.0	-2.4	2.6	0.0	6.4	2.2	-2.5	-2.4	2.6	0.0
				Earthquake X Mode 6	0.1	-0.0	0.3	-0.0	0.2	-0.0	0.1	0.0	-0.2	-0.0	0.2	-0.0
				Earthquake X Mode 7	0.3	-0.3	-0.8	-0.2	-0.4	-0.0	0.3	0.1	0.3	-0.2	-0.4	-0.0
				Earthquake X Mode 8	0.1	-0.2	-0.5	-0.1	-0.2	-0.0	0.1	0.0	0.1	-0.1	-0.2	-0.0
				Earthquake X Mode 9	2.0	-1.3	1.5	-0.8	0.9	0.0	2.0	0.6	-0.8	-0.8	0.9	0.0
				Earthquake Y Mode 1	1.0	-0.2	-2.4	-0.4	-2.1	-0.0	1.0	0.7	2.9	-0.4	-2.1	-0.0
				Earthquake Y Mode 2	-6.2	3.4	-4.6	2.3	-3.2	-0.0	-6.2	-2.4	3.4	2.3	-3.2	-0.0
				Earthquake Y Mode 3	-0.2	0.8	-2.4	0.3	-2.2	0.0	-0.2	-0.0	3.0	0.3	-2.2	0.0
				Earthquake Y Mode 4	-0.2	0.1	0.4	0.1	0.2	0.0	-0.2	-0.1	-0.2	0.1	0.2	0.0
				Earthquake Y Mode 5	1.2	-0.7	0.7	-0.4	0.5	0.0	1.2	0.4	-0.5	-0.4	0.5	0.0
				Earthquake Y Mode 6	0.6	-0.4	2.1	-0.2	1.4	-0.0	0.6	0.2	-1.4	-0.2	1.4	-0.0
				Earthquake Y Mode 7	0.1	-0.1	-0.2	-0.1	-0.1	-0.0	0.1	0.0	0.1	-0.1	-0.1	-0.0
				Earthquake Y Mode 8	0.3	-0.4	-1.2	-0.2	-0.6	-0.0	0.3	0.1	0.4	-0.2	-0.6	-0.0
				Earthquake Y Mode 9	0.7	-0.5	0.6	-0.3	0.3	0.0	0.7	0.2	-0.3	-0.3	0.3	0.0
	Floor 4	50x50	9.00/11.50	Self weight	189.6	-4.7	-20.4	-3.6	-16.1	0.0	174.3	4.2	19.8	-3.6	-16.1	0.0
				Dead load	38.9	-0.5	-5.5	-0.5	-4.5	-0.0	38.9	0.8	5.6	-0.5	-4.5	-0.0
				Live load	48.2	-4.1	-13.6	-3.4	-11.2	0.0	48.2	4.4	14.4	-3.4	-11.2	0.0
				Wind +X ecc.+	4.5	-1.2	0.9	-1.1	0.7	0.0	4.5	1.6	-0.8	-1.1	0.7	0.0
				Wind +X ecc.-	4.2	-1.1	0.4	-1.1	0.2	-0.0	4.2	1.5	-0.1	-1.1	0.2	-0.0
				Wind -X ecc.+	-4.5	1.2	-0.9	1.1	-0.7	-0.0	-4.5	-1.6	0.8	1.1	-0.7	-0.0
				Wind -X ecc.-	-4.2	1.1	-0.4	1.1	-0.2	0.0	-4.2	-1.5	0.1	1.1	-0.2	0.0
				Wind +Y ecc.+	-3.7	1.1	-3.4	0.8	-3.3	-0.0	-3.7	-0.8	4.8	0.8	-3.3	-0.0
				Wind +Y ecc.-	-2.2	0.7	-1.2	0.6	-1.1	0.0	-2.2	-0.7	1.6	0.6	-1.1	0.0
				Wind -Y ecc.+	3.7	-1.1	3.4	-0.8	3.3	0.0	3.7	0.8	-4.8	-0.8	3.3	0.0
				Wind -Y ecc.-	2.2	-0.7	1.2	-0.6	1.1	-0.0	2.2	0.7	-1.6	-0.6	1.1	-0.0
				Earthquake X Mode 1	5.6	-2.0	-10.1	-2.4	-10.0	-0.1	5.6	4.0	14.9	-2.4	-10.0	-0.1
				Earthquake X Mode 2	-74.3	20.1	-23.4	17.2	-19.8	-0.1	-74.3	-22.8	26.1	17.2	-19.8	-0.1
				Earthquake X Mode 3	-0.4	0.2	-0.9	0.1	-0.9	0.0	-0.4	-0.1	1.2	0.1	-0.9	0.0
				Earthquake X Mode 4	-1.8	0.9	2.6	0.5	1.5	0.0	-1.8	-0.4	-1.3	0.5	1.5	0.0
				Earthquake X Mode 5	17.3	-4.0	4.0	-2.9	2.9	0.0	17.3	3.2	-3.3	-2.9	2.9	0.0
				Earthquake X Mode 6	0.3	-0.0	0.3	-0.0	0.2	-0.0	0.3	0.1	-0.2	-0.0	0.2	-0.0
				Earthquake X Mode 7	0.4	-0.1	-0.2	0.0	0.1	0.0	0.4	-0.2	-0.4	0.0	0.1	0.0
				Earthquake X Mode 8	0.1	-0.0	-0.1	0.0	0.1	0.0	0.1	-0.1	-0.3	0.0	0.1	0.0
				Earthquake X Mode 9	3.3	-0.1	0.0	0.1	-0.2	-0.0	3.3	-0.4	0.5	0.1	-0.2	-0.0
				Earthquake Y Mode 1	2.5	-0.9	-4.6	-1.1	-4.5	-0.1	2.5	1.8	6.7	-1.1	-4.5	-0.1
				Earthquake Y Mode 2	-23.0	6.2	-7.2	5.3	-6.1	-0.0	-23.0	-7.0	8.1	5.3	-6.1	-0.0
				Earthquake Y Mode 3	-2.2	1.0	-5.5	0.6	-5.3	0.1	-2.2	-0.5	7.7	0.6	-5.3	0.1
				Earthquake Y Mode 4	-0.4	0.2	0.5	0.1	0.3	0.0	-0.4	-0.1	-0.3	0.1	0.3	0.0
				Earthquake Y Mode 5	3.1	-0.7	0.7	-0.5	0.5	0.0	3.1	0.6	-0.6	-0.5	0.5	0.0
				Earthquake Y Mode 6	2.2	-0.3	2.8	-0.3	1.8	-0.0	2.2	0.6	-1.6	-0.3	1.8	-0.0
				Earthquake Y Mode 7	0.1	-0.0	-0.1	0.0	0.0	0.0	0.1	-0.1	-0.1	0.0	0.0	0.0
				Earthquake Y Mode 8	0.4	-0.1	-0.3	0.1	0.1	0.0	0.4	-0.3	-0.6	0.1	0.1	0.0
				Earthquake Y Mode 9	1.2	-0.0	0.0	0.0	-0.1	-0.0	1.2	-0.1	0.2	0.0	-0.1	-0.0
Floor 3	50x50	6.00/8.50	Self weight	282.0	-5.5	-20.4	-4.4	-16.7	0.0	266.7	5.5	21.5	-4.4	-16.7	0.0	
				Dead load	76.0	-0.3	-4.8	-0.2	-3.8	-0.0	76.0	0.2	4.7	-0.2	-3.8	-0.0
				Live load	84.9	-3.9	-12.5	-3.1	-10.1	0.0	84.9	3.8	12.8	-3.1	-10.1	0.0
				Wind +X ecc.+	9.4	-1.9	1.1	-1.6	0.9	0.0	9.4	2.1	-1.1	-1.6	0.9	0.0
				Wind +X ecc.-	8.7	-1.8	0.4	-1.5	0.3	-0.0	8.7	2.1	-0.2	-1.5	0.3	-0.0
				Wind -X ecc.+	-9.4	1.9	-1.1	1.6	-0.9	-0.0	-9.4	-2.1	1.1	1.6	-0.9	-0.0
				Wind -X ecc.-	-8.7	1.8	-0.4	1.5	-0.3	0.0	-8.7	-2.1	0.2	1.5	-0.3	0.0
				Wind +Y ecc.+	-8.0	1.3	-4.9	1.0	-4.3	-0.0	-8.0	-1.1	5.8	1.0	-4.3	-0.0
				Wind +Y ecc.-	-4.8	0.9	-1.7	0.8	-1.4	0.0	-4.8	-1.0	1.9	0.8	-1.4	0.0
				Wind -Y ecc.+	8.0	-1.3	4.9	-1.0	4.3	0.0	8.0	1.1	-5.8	-1.0	4.3	0.0
				Wind -Y ecc.-	4.8	-0.9	1.7	-0.8	1.4	-0.0	4.8	1.0	-1.9	-0.8	1.4	-0.0
				Earthquake X Mode 1	10.9	-3.9	-14.5	-3.5	-12.4	-0.2	10.9	4.8	16.5	-3.5	-12.4	-0.2
				Earthquake X Mode 2	-147.7	26.6	-29.3	21.5	-23.7	-0.1	-147.7	-27.2	30.0	21.5	-23.7	-0.1
				Earthquake X Mode 3	-0.9	0.2	-1.3	0.1	-1.0	0.0	-0.9	-0.2	1.3	0.1	-1.0	0.0
				Earthquake X Mode 4	-2.2	0.6	1.4	0.1	0.3	0.0	-2.2	0.4	0.6	0.1	0.3	0.0
				Earthquake X Mode 5	22.4	-1.2	1.3	-0.4	0.5	0.0	22.4	-0.2	0.0	-0.4	0.5	0.0
				Earthquake X Mode 6	0.4	0.0	0.2	-0.0	0.0	-0.0	0.4	0.0	0.1	-0.0	0.0	-0.0
				Earthquake X Mode 7	0.2	0.3	0.7	0.2	0.5	0.0	0.2	-0.3	-0.6	0.2	0.5	0.0
				Earthquake X Mode 8	0.0	0.1	0.4	0.1	0.3	0.0	0.0	-0.1	-0.4	0.1	0.3	0.0
				Earthquake X Mode 9	1.1	1.3	-1.4	1.0	-1.1	-0.0	1.1	-1.2	1.3	1.0	-1.1	-0.0
				Earthquake Y Mode 1	5.0	-1.8	-6.6	-1.6	-5.6	-0.1	5.0	2.2	7.5	-1.6	-5.6	-0.1
				Earthquake Y Mode 2	-45.6	8.2	-9.1	6.6	-7.3	-0.0	-45.6	-8.4	9.3	6.6	-7.3	-0.0
				Earthquake Y Mode 3	-5.5	1.0	-7.8	0.8	-6.4	0.1	-5.5	-1.0	8.2	0.8	-6.4	0.1
				Earthquake Y Mode 4	-0.4	0.1	0.3	0.0	0.1							



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	50x50	3.00/5.50	Self weight	377.1	-7.7	-22.2	-5.7	-17.3	0.0	361.8	6.5	21.1	-5.7	-17.3	0.0
				Dead load	113.5	-0.8	-5.3	-0.6	-4.1	0.0	113.5	0.6	4.9	-0.6	-4.1	0.0
				Live load	123.0	-5.3	-13.9	-4.0	-10.8	0.0	123.0	4.7	13.2	-4.0	-10.8	0.0
				Wind +X ecc.+	15.7	-2.5	1.3	-2.0	1.0	0.0	15.7	2.3	-1.3	-2.0	1.0	0.0
				Wind +X ecc.-	14.6	-2.5	0.3	-1.9	0.3	-0.0	14.6	2.3	-0.4	-1.9	0.3	-0.0
				Wind -X ecc.+	-15.7	2.5	-1.3	2.0	-1.0	-0.0	-15.7	-2.3	1.3	2.0	-1.0	-0.0
				Wind -X ecc.-	-14.6	2.5	-0.3	1.9	-0.3	0.0	-14.6	-2.3	0.4	1.9	-0.3	0.0
				Wind +Y ecc.+	-13.3	1.4	-6.7	1.1	-5.1	-0.0	-13.3	-1.5	6.0	1.1	-5.1	-0.0
				Wind +Y ecc.-	-7.9	1.1	-2.2	0.9	-1.6	0.0	-7.9	-1.2	1.8	0.9	-1.6	0.0
				Wind -Y ecc.+	13.3	-1.4	6.7	-1.1	5.1	0.0	13.3	1.5	-6.0	-1.1	5.1	0.0
				Wind -Y ecc.-	7.9	-1.1	2.2	-0.9	1.6	-0.0	7.9	1.2	-1.8	-0.9	1.6	-0.0
				Earthquake X Mode 1	17.9	-6.0	-18.6	-4.1	-13.4	-0.2	17.9	4.3	14.8	-4.1	-13.4	-0.2
				Earthquake X Mode 2	-231.2	31.0	-33.1	23.5	-25.1	-0.1	-231.2	-27.6	29.6	23.5	-25.1	-0.1
				Earthquake X Mode 3	-1.6	0.1	-1.6	0.2	-1.1	0.0	-1.6	-0.3	1.1	0.2	-1.1	0.0
				Earthquake X Mode 4	-1.8	-0.3	-0.7	-0.5	-1.1	-0.0	-1.8	0.8	2.0	-0.5	-1.1	-0.0
				Earthquake X Mode 5	18.6	2.4	-2.3	2.2	-2.1	-0.0	18.6	-3.1	2.9	2.2	-2.1	-0.0
				Earthquake X Mode 6	0.4	0.0	-0.1	0.0	-0.2	0.0	0.4	-0.0	0.3	0.0	-0.2	0.0
				Earthquake X Mode 7	-0.0	0.2	0.4	0.0	0.1	0.0	-0.0	0.1	0.3	0.0	0.1	0.0
				Earthquake X Mode 8	-0.0	0.1	0.2	0.0	0.0	-0.0	-0.0	0.1	0.2	0.0	0.0	-0.0
				Earthquake X Mode 9	-0.5	0.3	-0.3	0.1	-0.0	-0.0	-0.5	0.1	-0.2	0.1	-0.0	-0.0
				Earthquake Y Mode 1	8.1	-2.7	-8.4	-1.9	-6.1	-0.1	8.1	2.0	6.7	-1.9	-6.1	-0.1
				Earthquake Y Mode 2	-71.4	9.6	-10.2	7.2	-7.7	-0.0	-71.4	-8.5	9.1	7.2	-7.7	-0.0
				Earthquake Y Mode 3	-9.5	0.7	-9.8	0.9	-6.7	0.1	-9.5	-1.6	6.9	0.9	-6.7	0.1
				Earthquake Y Mode 4	-0.3	-0.1	-0.1	-0.1	-0.2	-0.0	-0.3	0.2	0.4	-0.1	-0.2	-0.0
				Earthquake Y Mode 5	3.4	0.4	-0.4	0.4	-0.4	-0.0	3.4	-0.6	0.5	0.4	-0.4	-0.0
				Earthquake Y Mode 6	3.0	0.3	-1.1	0.1	-1.3	0.0	3.0	-0.0	2.2	0.1	-1.3	0.0
				Earthquake Y Mode 7	-0.0	0.1	0.1	0.0	0.0	0.0	-0.0	0.0	0.1	0.0	0.0	0.0
				Earthquake Y Mode 8	-0.1	0.2	0.5	0.0	0.0	-0.0	-0.1	0.2	0.4	0.0	0.0	-0.0
				Earthquake Y Mode 9	-0.2	0.1	-0.1	0.0	-0.0	-0.0	-0.2	0.0	-0.1	0.0	-0.0	-0.0
	Floor 1	50x50	0.00/2.50	Self weight	477.5	-4.1	-10.6	-4.3	-11.5	0.0	462.2	6.8	18.2	-4.3	-11.5	0.0
				Dead load	152.6	-0.5	-2.5	-0.5	-2.6	0.0	152.6	0.8	4.0	-0.5	-2.6	0.0
				Live load	164.1	-2.7	-6.6	-2.9	-7.1	0.0	164.1	4.6	11.3	-2.9	-7.1	0.0
				Wind +X ecc.+	21.6	-2.8	0.6	-1.7	0.6	0.0	21.6	1.4	-1.0	-1.7	0.6	0.0
				Wind +X ecc.-	20.1	-3.0	-0.8	-1.7	-0.1	-0.0	20.1	1.4	-0.5	-1.7	-0.1	-0.0
				Wind -X ecc.+	-21.6	2.8	-0.6	1.7	-0.6	-0.0	-21.6	-1.4	1.0	1.7	-0.6	-0.0
				Wind -X ecc.-	-20.1	3.0	0.8	1.7	0.1	0.0	-20.1	-1.4	0.5	1.7	0.1	0.0
				Wind +Y ecc.+	-18.1	0.3	-8.8	0.6	-4.7	-0.0	-18.1	-1.3	3.0	0.6	-4.7	-0.0
				Wind +Y ecc.-	-11.0	1.1	-2.3	0.8	-1.2	0.0	-11.0	-1.0	0.8	0.8	-1.2	0.0
				Wind -Y ecc.+	18.1	-0.3	8.8	-0.6	4.7	0.0	18.1	1.3	-3.0	-0.6	4.7	0.0
				Wind -Y ecc.-	11.0	-1.1	2.3	-0.8	1.2	-0.0	11.0	1.0	-0.8	-0.8	1.2	-0.0
				Earthquake X Mode 1	24.9	-9.9	-25.2	-4.5	-12.2	-0.1	24.9	1.2	5.2	-4.5	-12.2	-0.1
				Earthquake X Mode 2	-302.4	27.1	-28.3	17.2	-18.0	-0.1	-302.4	-15.8	16.6	17.2	-18.0	-0.1
				Earthquake X Mode 3	-2.2	-0.0	-1.7	0.1	-0.8	0.0	-2.2	-0.3	0.3	0.1	-0.8	0.0
				Earthquake X Mode 4	-0.8	-1.3	-3.2	-0.7	-1.8	-0.0	-0.8	0.5	1.3	-0.7	-1.8	-0.0
				Earthquake X Mode 5	10.1	3.9	-3.8	2.7	-2.6	-0.0	10.1	-2.8	2.7	2.7	-2.6	-0.0
				Earthquake X Mode 6	0.2	0.0	-0.4	0.0	-0.2	0.0	0.2	-0.0	0.2	0.0	-0.2	0.0
				Earthquake X Mode 7	0.2	-0.4	-0.9	-0.3	-0.6	-0.0	0.2	0.2	0.6	-0.3	-0.6	-0.0
				Earthquake X Mode 8	0.1	-0.2	-0.5	-0.1	-0.3	0.0	0.1	0.1	0.3	-0.1	-0.3	0.0
				Earthquake X Mode 9	1.1	-1.2	1.3	-0.9	1.0	0.0	1.1	1.0	-1.1	-0.9	1.0	0.0
				Earthquake Y Mode 1	11.3	-4.5	-11.4	-2.0	-5.5	-0.0	11.3	0.6	2.4	-2.0	-5.5	-0.0
				Earthquake Y Mode 2	-93.4	8.4	-8.8	5.3	-5.5	-0.0	-93.4	-4.9	5.1	5.3	-5.5	-0.0
				Earthquake Y Mode 3	-13.4	-0.1	-10.2	0.8	-4.7	0.1	-13.4	-2.1	1.6	0.8	-4.7	0.1
				Earthquake Y Mode 4	-0.2	-0.3	-0.6	-0.1	-0.3	-0.0	-0.2	0.1	0.2	-0.1	-0.3	-0.0
				Earthquake Y Mode 5	1.8	0.7	-0.7	0.5	-0.5	-0.0	1.8	-0.5	0.5	0.5	-0.5	-0.0
				Earthquake Y Mode 6	1.8	0.0	-3.1	0.2	-1.8	0.0	1.8	-0.4	1.4	0.2	-1.8	0.0
				Earthquake Y Mode 7	0.0	-0.1	-0.3	-0.1	-0.2	-0.0	0.0	0.1	0.2	-0.1	-0.2	-0.0
				Earthquake Y Mode 8	0.1	-0.4	-1.2	-0.3	-0.8	0.0	0.1	0.2	0.8	-0.3	-0.8	0.0
				Earthquake Y Mode 9	0.4	-0.4	0.5	-0.3	0.4	0.0	0.4	0.4	-0.4	-0.3	0.4	0.0
C15	techo	50x50	12.00/14.40	Self weight	90.9	46.8	1.5	34.3	1.8	0.0	76.2	-35.6	-2.9	34.3	1.8	0.0
				Dead load	77.3	29.7	0.1	27.9	-0.4	-0.0	77.3	-37.2	1.1	27.9	-0.4	-0.0
				Live load	15.3	19.6	0.6	12.3	0.4	0.0	15.3	-9.8	-0.3	12.3	0.4	0.0
				Wind +X ecc.+	-0.2	-0.4	-0.1	-0.4	-0.0	0.0	-0.2	0.5	0.0	-0.4	-0.0	0.0
				Wind +X ecc.-	-0.2	-0.4	0.6	-0.4	0.4	-0.0	-0.2	0.5	-0.4	-0.4	0.4	-0.0
				Wind -X ecc.+	0.2	0.4	0.1	0.4	0.0	-0.0	0.2	-0.5	-0.0	0.4	0.0	-0.0
				Wind -X ecc.-	0.2	0.4	-0.6	0.4	-0.4	0.0	0.2	-0.5	0.4	0.4	-0.4	0.0
				Wind +Y ecc.+	-0.0	0.0	-0.2	0.0	-0.1	-0.0	-0.0	-0.0	0.2	0.0	-0.1	-0.0
				Wind +Y ecc.-	-0.1	-0.0	-3.2	-0.0	-2.2	0.0	-0.1	0.0	2.0	-0.0	-2.2	0.0
				Wind -Y ecc.+	0.0	-0.0	0.2	-0.0	0.1	0.0	0.0	0.0	-0.2	-0.0	0.1	0.0
				Wind -Y ecc.-	0.1	0.0	3.2	0.0	2.2	-0.0	0.1	-0.0	-2.0	0.0	2.2	-0.0
				Earthquake X Mode 1	-0.2	-1.2	14.8	-1.2	9.9	-0.1	-0.2	1.6	-9.0	-1.2	9.9	-0.1
				Earthquake X Mode 2	2.7	6.1	8.3	5.5	5.5	-0.1	2.7	-7.1	-4.9	5.5	5.5	-0.1
				Earthquake X Mode 3	-0.2	-0.2	-4.1	-0.2	-2.8	0.0	-0.2	0.2	2.5	-0.2	-2.8	0.0
				Earthquake X Mode 4	0.2	0.5	-4.4	0.3	-2.8	0.0	0.2	-0.3	2.4	0.3	-2.8	0.0
				Earthquake X Mode 5	-0.5	-2.3	-2.7	-1.6	-1.7	0.0	-0.5	1.6	1.4	-1.6	-1.7	0.0
				Earthquake X Mode 6	0.0	0.0	0.7	0.0	0.5	-0.0	0.0	-0.0	-0.4	0.0	0.5	-0.0
				Earthquake X Mode 7	-0.1	-0.2	1.6	-0.1	1.0	-0.0	-0.1	0.1	-0.7	-0.1	1.0	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.6	-0.1	-0.4	-0.0	-0.0	0.1	0.3	-0.1	-0.4	-0.0
				Earthquake X Mode 9	-0.1	-1.1	-0.5	-0.6	-0.3	0.0	-0.1	0.4	0.2	-0.6	-0.3	0.0
				Earthquake Y Mode 1	-0.1	-0.6	6.7	-0.5	4.5	-0.0	-0.1	0.7	-4.1	-0.5	4.5	-0.0
				Earthquake Y Mode 2	0.8	1.9	2.6	1.7	1.7	-0.0	0.8	-2.2	-1.5	1.7	1.7	-0.0
				Earthquake Y Mode 3	-1.3	-1.2	-25.2	-1.1	-16.9	0.0	-1.3	1.5	15.5	-1.1	-16.9	0.0



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 4	50x50	9.00/11.40	Self weight	205.9	37.2	0.7	30.2	0.4	0.0	191.2	-35.2	-0.2	30.2	0.4	0.0
				Dead load	100.8	-0.3	0.7	-3.1	0.7	-0.0	100.8	7.2	-1.1	-3.1	0.7	-0.0
				Live load	60.6	24.1	0.6	20.5	0.5	0.0	60.6	-25.0	-0.7	20.5	0.5	0.0
				Wind +X ecc.+	-0.6	-0.6	-0.1	-0.7	-0.1	0.0	-0.6	1.0	0.1	-0.7	-0.1	0.0
				Wind +X ecc.-	-0.6	-0.6	1.2	-0.7	1.0	-0.0	-0.6	1.0	-1.3	-0.7	1.0	-0.0
				Wind -X ecc.+	0.6	0.6	0.1	0.7	0.1	-0.0	0.6	-1.0	-0.1	0.7	0.1	-0.0
				Wind -X ecc.-	0.6	0.6	-1.2	0.7	-1.0	0.0	0.6	-1.0	1.3	0.7	-1.0	0.0
				Wind +Y ecc.+	-0.0	0.0	-0.9	0.0	-0.8	-0.0	-0.0	-0.0	1.1	0.0	-0.8	-0.0
				Wind +Y ecc.-	-0.1	0.0	-6.6	-0.0	-5.9	0.0	-0.1	0.0	7.5	-0.0	-5.9	0.0
				Wind -Y ecc.+	0.0	-0.0	0.9	-0.0	0.8	0.0	0.0	0.0	-1.1	-0.0	0.8	0.0
				Wind -Y ecc.-	0.1	-0.0	6.6	0.0	5.9	-0.0	0.1	-0.0	-7.5	0.0	5.9	-0.0
				Earthquake X Mode 1	-1.7	-2.1	26.0	-2.2	22.7	-0.1	-1.7	3.3	-28.6	-2.2	22.7	-0.1
				Earthquake X Mode 2	8.3	9.0	12.9	9.2	11.1	-0.1	8.3	-13.2	-13.8	9.2	11.1	-0.1
				Earthquake X Mode 3	-0.3	-0.3	-7.5	-0.3	-6.6	0.0	-0.3	0.4	8.3	-0.3	-6.6	0.0
				Earthquake X Mode 4	0.5	0.6	-5.2	0.4	-4.1	0.0	0.5	-0.3	4.6	0.4	-4.1	0.0
				Earthquake X Mode 5	-1.4	-2.7	-2.9	-1.6	-2.3	0.0	-1.4	1.1	2.5	-1.6	-2.3	0.0
				Earthquake X Mode 6	-0.0	0.0	0.9	0.0	0.7	-0.0	-0.0	-0.0	-0.8	0.0	0.7	-0.0
				Earthquake X Mode 7	-0.1	-0.1	0.1	0.0	-0.1	0.0	-0.1	-0.1	0.4	0.0	-0.1	0.0
				Earthquake X Mode 8	-0.0	-0.1	-0.1	0.0	-0.0	0.0	-0.0	-0.1	-0.1	0.0	-0.0	0.0
				Earthquake X Mode 9	-0.2	-0.3	0.1	0.1	0.1	-0.0	-0.2	-0.6	-0.2	0.1	0.1	-0.0
				Earthquake Y Mode 1	-0.8	-1.0	11.8	-1.0	10.3	-0.1	-0.8	1.5	-13.0	-1.0	10.3	-0.1
				Earthquake Y Mode 2	2.6	2.8	4.0	2.8	3.4	-0.0	2.6	-4.1	-4.3	2.8	3.4	-0.0
				Earthquake Y Mode 3	-2.1	-1.8	-46.0	-1.8	-40.4	0.1	-2.1	2.6	50.9	-1.8	-40.4	0.1
				Earthquake Y Mode 4	0.1	0.1	-1.0	0.1	-0.8	0.0	0.1	-0.1	0.9	0.1	-0.8	0.0
				Earthquake Y Mode 5	-0.3	-0.5	-0.5	-0.3	-0.4	0.0	-0.3	0.2	0.5	-0.3	-0.4	0.0
				Earthquake Y Mode 6	-0.1	0.4	7.7	0.2	6.1	-0.0	-0.1	-0.1	-6.9	0.2	6.1	-0.0
				Earthquake Y Mode 7	-0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.1	0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.0	-0.1	-0.3	0.1	-0.0	0.0	-0.0	-0.3	-0.2	0.1	-0.0	0.0
				Earthquake Y Mode 9	-0.1	-0.1	0.0	0.0	0.1	-0.0	-0.1	-0.2	-0.1	0.0	0.1	-0.0
	Floor 3	50x50	6.00/8.40	Self weight	318.5	37.4	1.1	31.8	0.9	0.0	303.8	-38.9	-1.1	31.8	0.9	0.0
				Dead load	123.9	6.5	0.2	6.3	0.2	-0.0	123.9	-8.5	-0.2	6.3	0.2	-0.0
				Live load	106.4	21.9	0.6	18.4	0.5	0.0	106.4	-22.3	-0.5	18.4	0.5	0.0
				Wind +X ecc.+	-1.1	-1.0	-0.1	-0.9	-0.1	0.0	-1.1	1.3	0.1	-0.9	-0.1	0.0
				Wind +X ecc.-	-1.1	-1.0	1.6	-0.9	1.4	-0.0	-1.1	1.3	-1.7	-0.9	1.4	-0.0
				Wind -X ecc.+	1.1	1.0	0.1	0.9	0.1	-0.0	1.1	-1.3	-0.1	0.9	0.1	-0.0
				Wind -X ecc.-	1.1	1.0	-1.6	0.9	-1.4	0.0	1.1	-1.3	1.7	0.9	-1.4	0.0
				Wind +Y ecc.+	0.0	0.0	-1.5	0.0	-1.4	-0.0	0.0	-0.0	1.8	0.0	-1.4	-0.0
				Wind +Y ecc.-	0.0	0.0	-9.3	0.0	-8.1	0.0	0.0	-0.0	10.1	0.0	-8.1	0.0
				Wind -Y ecc.+	-0.0	-0.0	1.5	-0.0	1.4	0.0	-0.0	0.0	-1.8	-0.0	1.4	0.0
				Wind -Y ecc.-	-0.0	-0.0	9.3	-0.0	8.1	-0.0	-0.0	0.0	-10.1	-0.0	8.1	-0.0
				Earthquake X Mode 1	-3.9	-3.3	32.6	-2.9	27.7	-0.2	-3.9	3.8	-33.8	-2.9	27.7	-0.2
				Earthquake X Mode 2	15.0	13.2	14.9	11.7	12.5	-0.1	15.0	-14.9	-15.2	11.7	12.5	-0.1
				Earthquake X Mode 3	-0.4	-0.4	-9.5	-0.4	-8.1	0.0	-0.4	0.5	9.9	-0.4	-8.1	0.0
				Earthquake X Mode 4	0.7	0.4	-1.9	0.1	-1.1	0.0	0.7	0.2	0.7	0.1	-1.1	0.0
				Earthquake X Mode 5	-1.8	-1.6	-0.9	-0.3	-0.4	0.0	-1.8	-0.8	0.2	-0.3	-0.4	0.0
				Earthquake X Mode 6	-0.0	0.0	0.4	0.0	0.2	-0.0	-0.0	0.0	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 7	-0.0	0.2	-1.7	0.1	-1.4	0.0	-0.0	-0.1	1.7	0.1	-1.4	0.0
				Earthquake X Mode 8	0.0	0.2	0.7	0.1	0.6	0.0	0.0	-0.1	-0.7	0.1	0.6	0.0
				Earthquake X Mode 9	-0.0	0.9	0.6	0.7	0.4	-0.0	-0.0	-0.7	-0.5	0.7	0.4	-0.0
				Earthquake Y Mode 1	-1.8	-1.5	14.8	-1.3	12.6	-0.1	-1.8	1.7	-15.3	-1.3	12.6	-0.1
				Earthquake Y Mode 2	4.6	4.1	4.6	3.6	3.9	-0.0	4.6	-4.6	-4.7	3.6	3.9	-0.0
				Earthquake Y Mode 3	-2.5	-2.5	-58.5	-2.2	-49.8	0.1	-2.5	2.8	61.1	-2.2	-49.8	0.1
				Earthquake Y Mode 4	0.1	0.1	-0.4	0.0	-0.2	0.0	0.1	0.0	0.1	0.0	-0.2	0.0
				Earthquake Y Mode 5	-0.3	-0.3	-0.2	-0.1	-0.1	0.0	-0.3	-0.1	0.0	-0.1	-0.1	0.0
				Earthquake Y Mode 6	-0.1	0.2	3.2	0.0	1.9	-0.0	-0.1	0.1	-1.4	0.0	1.9	-0.0
				Earthquake Y Mode 7	-0.0	0.0	-0.5	0.0	-0.4	0.0	-0.0	-0.0	0.5	0.0	-0.4	0.0
				Earthquake Y Mode 8	0.0	0.4	1.8	0.3	1.5	0.0	0.0	-0.3	-1.8	0.3	1.5	0.0
				Earthquake Y Mode 9	-0.0	0.3	0.2	0.3	0.2	-0.0	-0.0	-0.3	-0.2	0.3	0.2	-0.0
	Floor 2	50x50	3.00/5.40	Self weight	430.3	39.5	1.8	31.9	1.2	0.0	415.6	-37.1	-1.0	31.9	1.2	0.0
				Dead load	147.2	4.8	0.5	3.7	0.4	0.0	147.2	-4.2	-0.4	3.7	0.4	0.0
				Live load	151.6	23.9	1.0	19.4	0.7	0.0	151.6	-22.5	-0.6	19.4	0.7	0.0
				Wind +X ecc.+	-1.8	-1.4	-0.1	-1.1	-0.1	0.0	-1.8	1.2	0.1	-1.1	-0.1	0.0
				Wind +X ecc.-	-1.8	-1.4	2.0	-1.1	1.7	-0.0	-1.8	1.2	-2.0	-1.1	1.7	-0.0
				Wind -X ecc.+	1.8	1.4	0.1	1.1	0.1	-0.0	1.8	-1.2	-0.1	1.1	0.1	-0.0
				Wind -X ecc.-	1.8	1.4	-2.0	1.1	-1.7	0.0	1.8	-1.2	2.0	1.1	-1.7	0.0
				Wind +Y ecc.+	0.1	0.0	-2.4	0.0	-2.1	-0.0	0.1	-0.0	2.6	0.0	-2.1	-0.0
				Wind +Y ecc.-	0.3	0.0	-12.2	0.0	-10.2	0.0	0.3	-0.0	12.2	0.0	-10.2	0.0
				Wind -Y ecc.+	-0.1	-0.0	2.4	-0.0	2.1	0.0	-0.1	0.0	-2.6	-0.0	2.1	0.0
				Wind -Y ecc.-	-0.3	-0.0	12.2	-0.0	10.2	-0.0	-0.3	0.0	-12.2	-0.0	10.2	-0.0
				Earthquake X Mode 1	-6.6	-4.4	36.6	-3.2	29.7	-0.2	-6.6	3.3	-34.7	-3.2	29.7	-0.2
				Earthquake X Mode 2	22.2	17.1	15.8	12.5	12.7	-0.1	22.2	-12.8	-14.7	12.5	12.7	-0.1
				Earthquake X Mode 3	-0.4	-0.5	-11.0	-0.4	-9.0	0.0	-0.4	0.4	10.6	-0.4	-9.0	0.0
				Earthquake X Mode 4	0.5	-0.2	2.6	-0.3	2.4	-0.0	0.5	0.5	-3.3	-0.3	2.4	-0.0
				Earthquake X Mode 5	-1.6	0.8	1.6	1.2	1.5	-0.0	-1.6	-2.1	-2.0	1.2	1.5	-0.0
				Earthquake X Mode 6	-0.0	-0.0	-0.4	-0.0	-0.4	0.0	-0.0	0.0	0.6	-0.0	-0.4	0.0
				Earthquake X Mode 7	0.0	0.1	-0.5	0.0	-0.2	0.0	0.0	0.1	0.0	0.0	-0.2	0.0
				Earthquake X Mode 8	0.0	0.1	0.3	0.0	0.1	-0.0	0.0	0.1	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 9	0.1	0.5	0.1	0.1	-0.0	-0.0	0.1	0.4	0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-3.0	-2.0	16.6	-1.5	13.5	-0.1	-3.0	1.5	-15.8	-1.5	13.5	-0.1
				Earthquake Y Mode 2	6.8	5.3	4.9	3.9	3.9	-0.0	6.8	-4.0	-4.5	3.9	3.9	-0.0
				Earthquake Y Mode 3	-2.3	-3.2	-67.9	-2.3	-55.6	0.1	-2.3	2.4	65.5	-2.3	-55.6	0.1
				Earthquake Y Mode 4												



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	50x50	0.00/2.40	Self weight	537.0	19.3	0.5	21.6	1.2	0.0	522.3	-32.5	-2.3	21.6	1.2	0.0
				Dead load	169.5	2.5	0.2	2.8	0.4	0.0	169.5	-4.3	-0.7	2.8	0.4	0.0
				Live load	194.3	11.7	0.2	13.0	0.6	0.0	194.3	-19.6	-1.3	13.0	0.6	0.0
				Wind +X ecc.+	-2.4	-2.3	-0.1	-1.2	-0.1	0.0	-2.4	0.5	0.1	-1.2	-0.1	0.0
				Wind +X ecc.-	-2.5	-2.3	2.0	-1.2	1.4	-0.0	-2.5	0.5	-1.4	-1.2	1.4	-0.0
				Wind -X ecc.+	2.4	2.3	0.1	1.2	0.1	-0.0	2.4	-0.5	-0.1	1.2	0.1	-0.0
				Wind -X ecc.-	2.5	2.3	-2.0	1.2	-1.4	0.0	2.5	-0.5	1.4	1.2	-1.4	0.0
				Wind +Y ecc.+	0.2	0.0	-3.6	0.0	-2.6	0.0	0.2	-0.0	2.7	0.0	-2.6	0.0
				Wind +Y ecc.-	0.7	-0.0	-13.2	0.0	-9.5	0.0	0.7	-0.0	9.5	0.0	-9.5	0.0
				Wind -Y ecc.+	-0.2	-0.0	3.6	-0.0	2.6	0.0	-0.2	0.0	-2.7	-0.0	2.6	0.0
				Wind -Y ecc.-	-0.7	0.0	13.2	-0.0	9.5	-0.0	-0.7	0.0	-9.5	-0.0	9.5	-0.0
				Earthquake X Mode 1	-9.2	-5.9	31.3	-2.9	22.1	-0.1	-9.2	1.0	-21.7	-2.9	22.1	-0.1
				Earthquake X Mode 2	27.8	23.2	12.1	11.2	8.4	-0.1	27.8	-3.6	-8.2	11.2	8.4	-0.1
				Earthquake X Mode 3	-0.2	-0.7	-10.4	-0.3	-7.4	0.0	-0.2	0.1	7.3	-0.3	-7.4	0.0
				Earthquake X Mode 4	0.2	-0.7	4.6	-0.4	3.4	-0.0	0.2	0.3	-3.5	-0.4	3.4	-0.0
				Earthquake X Mode 5	-1.1	3.4	2.6	1.9	1.9	-0.0	-1.1	-1.2	-2.0	1.9	1.9	-0.0
				Earthquake X Mode 6	0.0	-0.1	-0.9	-0.0	-0.7	0.0	0.0	0.0	0.7	-0.0	-0.7	0.0
				Earthquake X Mode 7	-0.0	-0.2	1.5	-0.1	1.2	-0.0	-0.0	0.1	-1.3	-0.1	1.2	-0.0
				Earthquake X Mode 8	0.0	-0.2	-0.7	-0.1	-0.5	0.0	0.0	0.1	0.6	-0.1	-0.5	0.0
				Earthquake X Mode 9	-0.0	-1.1	-0.4	-0.7	-0.3	0.0	-0.0	0.7	0.4	-0.7	-0.3	0.0
				Earthquake Y Mode 1	-4.2	-2.7	14.2	-1.3	10.0	-0.0	-4.2	0.5	-9.8	-1.3	10.0	-0.0
				Earthquake Y Mode 2	8.6	7.2	3.7	3.5	2.6	-0.0	8.6	-1.1	-2.5	3.5	2.6	-0.0
				Earthquake Y Mode 3	-1.4	-4.5	-64.1	-2.1	-45.5	0.1	-1.4	0.6	45.2	-2.1	-45.5	0.1
				Earthquake Y Mode 4	0.0	-0.1	0.9	-0.1	0.6	-0.0	0.0	0.1	-0.7	-0.1	0.6	-0.0
				Earthquake Y Mode 5	-0.2	0.6	0.5	0.3	0.3	-0.0	-0.2	-0.2	-0.4	0.3	0.3	-0.0
				Earthquake Y Mode 6	0.2	-0.5	-7.4	-0.3	-5.4	0.0	0.2	0.1	5.7	-0.3	-5.4	0.0
				Earthquake Y Mode 7	-0.0	-0.1	0.5	-0.0	0.4	-0.0	-0.0	0.0	-0.4	-0.0	0.4	-0.0
				Earthquake Y Mode 8	0.0	-0.5	-1.7	-0.3	-1.3	0.0	0.0	0.3	1.5	-0.3	-1.3	0.0
				Earthquake Y Mode 9	-0.0	-0.4	-0.2	-0.3	-0.1	0.0	-0.0	0.2	0.1	-0.3	-0.1	0.0
C16	techo	50x50	12.00/14.40	Self weight	120.2	-35.3	4.0	-24.7	3.7	0.0	105.5	24.1	-4.8	-24.7	3.7	0.0
				Dead load	138.5	-19.6	-0.4	-17.8	-0.9	-0.0	138.5	23.1	1.6	-17.8	-0.9	-0.0
				Live load	23.4	-14.8	1.7	-9.1	1.0	0.0	23.4	7.0	-0.8	-9.1	1.0	0.0
				Wind +X ecc.+	-0.1	-0.9	-0.0	-0.7	-0.0	0.0	-0.1	0.7	0.0	-0.7	-0.0	0.0
				Wind +X ecc.-	-0.1	-0.9	0.3	-0.6	0.2	-0.0	-0.1	0.7	-0.2	-0.6	0.2	-0.0
				Wind -X ecc.+	0.1	0.9	0.0	0.7	0.0	-0.0	0.1	-0.7	-0.0	0.7	0.0	-0.0
				Wind -X ecc.-	0.1	0.9	-0.3	0.6	-0.2	0.0	0.1	-0.7	0.2	0.6	-0.2	0.0
				Wind +Y ecc.+	-0.0	0.0	-1.1	0.0	-0.8	-0.0	-0.0	-0.0	0.7	0.0	-0.8	-0.0
				Wind +Y ecc.-	-0.1	-0.0	-2.7	-0.0	-1.9	0.0	-0.1	0.0	1.8	-0.0	-1.9	0.0
				Wind -Y ecc.+	0.0	-0.0	1.1	-0.0	0.8	0.0	0.0	0.0	-0.7	-0.0	0.8	0.0
				Wind -Y ecc.-	0.1	0.0	2.7	0.0	1.9	-0.0	0.1	-0.0	-1.8	0.0	1.9	-0.0
				Earthquake X Mode 1	-0.2	-2.9	7.5	-2.2	5.1	-0.1	-0.2	2.3	-4.7	-2.2	5.1	-0.1
				Earthquake X Mode 2	2.1	13.1	2.9	9.5	1.9	-0.1	2.1	-9.8	-1.7	9.5	1.9	-0.1
				Earthquake X Mode 3	-0.2	-0.4	-3.4	-0.3	-2.3	0.0	-0.2	0.3	2.2	-0.3	-2.3	0.0
				Earthquake X Mode 4	0.1	0.8	-2.5	0.5	-1.6	0.0	0.1	-0.5	1.4	0.5	-1.6	0.0
				Earthquake X Mode 5	-0.5	-3.7	-1.3	-2.4	-0.8	0.0	-0.5	2.2	0.7	-2.4	-0.8	0.0
				Earthquake X Mode 6	0.0	0.1	0.6	0.0	0.4	-0.0	0.0	-0.0	-0.4	0.0	0.4	-0.0
				Earthquake X Mode 7	-0.0	-0.2	1.0	-0.1	0.6	-0.0	-0.0	0.1	-0.5	-0.1	0.6	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.6	-0.1	-0.4	-0.0	-0.0	0.1	0.3	-0.1	-0.4	-0.0
				Earthquake X Mode 9	-0.1	-1.3	-0.1	-0.8	-0.1	0.0	-0.1	0.5	0.0	-0.8	-0.1	0.0
				Earthquake Y Mode 1	-0.1	-1.3	3.4	-1.0	2.3	-0.0	-0.1	1.0	-2.1	-1.0	2.3	-0.0
				Earthquake Y Mode 2	0.7	4.0	0.9	2.9	0.6	-0.0	0.7	-3.0	-0.5	2.9	0.6	-0.0
				Earthquake Y Mode 3	-1.0	-2.6	-21.0	-1.9	-14.4	0.0	-1.0	1.9	13.4	-1.9	-14.4	0.0
				Earthquake Y Mode 4	0.0	0.1	-0.5	0.1	-0.3	0.0	0.0	-0.1	0.3	0.1	-0.3	0.0
				Earthquake Y Mode 5	-0.1	-0.7	-0.2	-0.4	-0.2	0.0	-0.1	0.4	0.1	-0.4	-0.2	0.0
				Earthquake Y Mode 6	0.1	0.6	5.3	0.4	3.5	-0.0	0.1	-0.3	-3.0	0.4	3.5	-0.0
				Earthquake Y Mode 7	-0.0	-0.1	0.3	-0.0	0.2	-0.0	-0.0	0.0	-0.1	-0.0	0.2	-0.0
				Earthquake Y Mode 8	-0.1	-0.6	-1.6	-0.3	-1.0	-0.0	-0.1	0.2	0.7	-0.3	-1.0	-0.0
				Earthquake Y Mode 9	-0.1	-0.5	-0.0	-0.3	-0.0	0.0	-0.1	0.2	0.0	-0.3	-0.0	0.0
	Floor 4	50x50	9.00/11.50	Self weight	264.3	-30.5	2.1	-24.1	1.4	0.0	249.0	29.8	-1.4	-24.1	1.4	0.0
				Dead load	148.8	-1.7	0.8	0.1	0.9	-0.0	148.8	-2.0	-1.4	0.1	0.9	-0.0
				Live load	92.4	-18.0	1.8	-14.7	1.5	0.0	92.4	18.7	-2.0	-14.7	1.5	0.0
				Wind +X ecc.+	-0.9	-1.3	-0.0	-1.2	-0.0	0.0	-0.9	1.7	0.1	-1.2	-0.0	0.0
				Wind +X ecc.-	-0.8	-1.3	0.6	-1.2	0.5	-0.0	-0.8	1.7	-0.7	-1.2	0.5	-0.0
				Wind -X ecc.+	0.9	1.3	0.0	1.2	0.0	-0.0	0.9	-1.7	-0.1	1.2	0.0	-0.0
				Wind -X ecc.-	0.8	1.3	-0.6	1.2	-0.5	0.0	0.8	-1.7	0.7	1.2	-0.5	0.0
				Wind +Y ecc.+	0.0	0.0	-2.2	0.0	-1.9	-0.0	0.0	-0.0	2.6	0.0	-1.9	-0.0
				Wind +Y ecc.-	-0.1	-0.0	-5.1	-0.0	-4.4	0.0	-0.1	0.0	5.9	-0.0	-4.4	0.0
				Wind -Y ecc.+	-0.0	-0.0	2.2	-0.0	1.9	0.0	-0.0	0.0	-2.6	-0.0	1.9	0.0
				Wind -Y ecc.-	0.1	0.0	5.1	0.0	4.4	-0.0	0.1	-0.0	-5.9	0.0	4.4	-0.0
				Earthquake X Mode 1	-2.6	-4.4	12.0	-4.0	10.1	-0.1	-2.6	5.5	-13.3	-4.0	10.1	-0.1
				Earthquake X Mode 2	11.9	18.9	3.6	16.6	2.9	-0.1	11.9	-22.7	-3.7	16.6	2.9	-0.1
				Earthquake X Mode 3	-0.4	-0.6	-5.7	-0.5	-4.8	0.0	-0.4	0.7	6.4	-0.5	-4.8	0.0
				Earthquake X Mode 4	0.5	0.8	-2.8	0.6	-2.1	0.0	0.5	-0.6	2.4	0.6	-2.1	0.0
				Earthquake X Mode 5	-2.1	-3.9	-1.3	-2.6	-0.9	0.0	-2.1	2.7	1.0	-2.6	-0.9	0.0
				Earthquake X Mode 6	0.0	0.1	0.8	0.0	0.6	-0.0	0.0	-0.0	-0.7	0.0	0.6	-0.0
				Earthquake X Mode 7	-0.1	-0.0	0.1	0.0	-0.1	0.0	-0.1	-0.1	0.2	0.0	-0.1	0.0
				Earthquake X Mode 8	-0.0	-0.0	-0.1	0.0	0.0	0.0	-0.0	-0.1	-0.1	0.0	0.0	0.0
				Earthquake X Mode 9	-0.3	-0.2	0.1	0.1	0.1	-0.0	-0.3	-0.5	-0.1	0.1	0.1	-0.0
				Earthquake Y Mode 1	-1.2	-2.0	5.4	-1.8	4.6	-0.1	-1.2	2.5	-6.0	-1.8	4.6	-0.1
				Earthquake Y Mode 2	3.7	5.8	1.1	5.1	0.9	-0.0	3.7	-7.0	-1.2	5.1	0.9	-0.0
				Earthquake Y Mode 3	-2.6	-3.8	-35.1	-3.4	-29.7	0.1	-2.6	4.6	39.1	-3.4	-29.7	0.1
				Earthquake Y Mode 4	0.1	0.2	-0.									



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.50	Self weight	407.0	-29.5	2.7	-24.0	2.1	0.0	391.7	30.5	-2.7	-24.0	2.1	0.0	0.0
				Dead load	161.6	-4.9	0.3	-4.4	0.2	-0.0	161.6	6.0	-0.2	-4.4	0.2	-0.0
				Live load	162.2	-16.5	1.7	-13.3	1.3	0.0	162.2	16.8	-1.6	-13.3	1.3	0.0
				Wind +X ecc.+	-1.7	-1.9	-0.1	-1.6	-0.0	0.0	-1.7	2.1	0.1	-1.6	-0.0	0.0
				Wind +X ecc.-	-1.7	-1.9	0.8	-1.6	0.7	-0.0	-1.7	2.1	-0.9	-1.6	0.7	-0.0
				Wind -X ecc.+	1.7	1.9	0.1	1.6	0.0	-0.0	1.7	-2.1	-0.1	1.6	0.0	-0.0
				Wind -X ecc.-	1.7	1.9	-0.8	1.6	-0.7	0.0	1.7	-2.1	0.9	1.6	-0.7	0.0
				Wind +Y ecc.+	0.1	0.0	-3.2	0.0	-2.7	-0.0	0.1	-0.0	3.5	0.0	-2.7	-0.0
				Wind +Y ecc.-	0.1	-0.0	-7.2	-0.0	-6.0	0.0	0.1	0.0	7.9	-0.0	-6.0	0.0
				Wind -Y ecc.+	-0.1	-0.0	3.2	-0.0	2.7	0.0	-0.1	0.0	-3.5	-0.0	2.7	0.0
				Wind -Y ecc.-	-0.1	0.0	7.2	0.0	6.0	-0.0	-0.1	-0.0	-7.9	0.0	6.0	-0.0
				Earthquake X Mode 1	-5.4	-5.9	15.4	-4.9	12.6	-0.2	-5.4	6.3	-16.1	-4.9	12.6	-0.2
				Earthquake X Mode 2	22.0	23.9	3.9	19.7	3.2	-0.1	22.0	-25.3	-4.0	19.7	3.2	-0.1
				Earthquake X Mode 3	-0.6	-0.8	-7.3	-0.6	-6.0	0.0	-0.6	0.8	7.7	-0.6	-6.0	0.0
				Earthquake X Mode 4	0.7	0.4	-1.1	0.1	-0.6	0.0	0.7	0.0	0.4	0.1	-0.6	0.0
				Earthquake X Mode 5	-2.9	-1.6	-0.4	-0.5	-0.2	0.0	-2.9	-0.3	0.1	-0.5	-0.2	0.0
				Earthquake X Mode 6	0.0	0.0	0.3	0.0	0.2	-0.0	0.0	0.0	-0.1	0.0	0.2	-0.0
				Earthquake X Mode 7	-0.0	0.2	-1.0	0.2	-0.8	0.0	-0.0	-0.2	1.0	0.2	-0.8	0.0
				Earthquake X Mode 8	-0.0	0.2	0.7	0.2	0.5	0.0	-0.0	-0.2	-0.7	0.2	0.5	0.0
				Earthquake X Mode 9	-0.1	1.2	0.1	0.9	0.1	-0.0	-0.1	-1.1	-0.1	0.9	0.1	-0.0
				Earthquake Y Mode 1	-2.5	-2.7	7.0	-2.2	5.7	-0.1	-2.5	2.9	-7.3	-2.2	5.7	-0.1
				Earthquake Y Mode 2	6.8	7.4	1.2	6.1	1.0	-0.0	6.8	-7.8	-1.2	6.1	1.0	-0.0
				Earthquake Y Mode 3	-3.7	-4.8	-45.1	-3.9	-36.9	0.1	-3.7	5.0	47.3	-3.9	-36.9	0.1
				Earthquake Y Mode 4	0.1	0.1	-0.2	0.0	-0.1	0.0	0.1	0.0	0.1	0.0	-0.1	0.0
				Earthquake Y Mode 5	-0.5	-0.3	-0.1	-0.1	-0.0	0.0	-0.5	-0.1	0.0	-0.1	-0.0	0.0
				Earthquake Y Mode 6	0.2	0.2	2.6	0.1	1.4	-0.0	0.2	0.0	-0.9	0.1	1.4	-0.0
				Earthquake Y Mode 7	-0.0	0.1	-0.3	0.0	-0.2	0.0	-0.0	-0.1	0.3	0.0	-0.2	0.0
				Earthquake Y Mode 8	-0.1	0.5	1.7	0.4	1.3	0.0	-0.1	-0.5	-1.6	0.4	1.3	0.0
				Earthquake Y Mode 9	-0.0	0.4	0.0	0.3	0.0	-0.0	-0.0	-0.4	-0.0	0.3	0.0	-0.0
Floor 2	50x50	3.00/5.50	Self weight	549.1	-30.1	4.0	-23.6	2.7	0.0	533.8	29.0	-2.9	-23.6	2.7	0.0	0.0
				Dead load	174.6	-3.8	0.5	-3.0	0.4	0.0	174.6	3.7	-0.5	-3.0	0.4	0.0
				Live load	231.5	-17.2	2.6	-13.5	1.8	0.0	231.5	16.6	-2.0	-13.5	1.8	0.0
				Wind +X ecc.+	-2.6	-2.4	-0.1	-1.8	-0.0	0.0	-2.6	2.2	0.1	-1.8	-0.0	0.0
				Wind +X ecc.-	-2.6	-2.4	1.1	-1.8	0.8	-0.0	-2.6	2.2	-1.0	-1.8	0.8	-0.0
				Wind -X ecc.+	2.6	2.4	0.1	1.8	0.0	-0.0	2.6	-2.2	-0.1	1.8	0.0	-0.0
				Wind -X ecc.-	2.6	2.4	-1.1	1.8	-0.8	0.0	2.6	-2.2	1.0	1.8	-0.8	0.0
				Wind +Y ecc.+	0.2	0.0	-4.2	0.0	-3.4	-0.0	0.2	-0.0	4.2	0.0	-3.4	-0.0
				Wind +Y ecc.-	0.3	-0.0	-9.4	-0.0	-7.5	0.0	0.3	0.0	9.3	-0.0	-7.5	0.0
				Wind -Y ecc.+	-0.2	-0.0	4.2	-0.0	3.4	0.0	-0.2	0.0	-4.2	-0.0	3.4	0.0
				Wind -Y ecc.-	-0.3	0.0	9.4	0.0	7.5	-0.0	-0.3	-0.0	-9.3	0.0	7.5	-0.0
				Earthquake X Mode 1	-8.5	-6.9	17.5	-5.1	13.7	-0.2	-8.5	6.0	-16.8	-5.1	13.7	-0.2
				Earthquake X Mode 2	32.7	27.5	4.0	20.5	3.1	-0.1	32.7	-23.9	-3.8	20.5	3.1	-0.1
				Earthquake X Mode 3	-0.7	-0.9	-8.5	-0.7	-6.6	0.0	-0.7	0.8	8.1	-0.7	-6.6	0.0
				Earthquake X Mode 4	0.6	-0.3	1.3	-0.4	1.2	-0.0	0.6	0.6	-1.7	-0.4	1.2	-0.0
				Earthquake X Mode 5	-2.7	1.7	0.7	1.8	0.6	-0.0	-2.7	-2.7	-0.9	1.8	0.6	-0.0
				Earthquake X Mode 6	0.0	-0.0	-0.4	-0.0	-0.3	0.0	0.0	0.0	0.5	-0.0	-0.3	0.0
				Earthquake X Mode 7	0.0	0.1	-0.3	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
				Earthquake X Mode 8	-0.0	0.1	0.2	0.0	0.1	-0.0	-0.0	0.0	-0.0	0.0	0.1	-0.0
				Earthquake X Mode 9	0.1	0.4	-0.0	0.1	-0.0	-0.0	0.1	0.2	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-3.9	-3.1	8.0	-2.3	6.2	-0.1	-3.9	2.7	-7.6	-2.3	6.2	-0.1
				Earthquake Y Mode 2	10.1	8.5	1.2	6.3	1.0	-0.0	10.1	-7.4	-1.2	6.3	1.0	-0.0
				Earthquake Y Mode 3	-4.5	-5.5	-52.1	-4.1	-40.8	0.1	-4.5	4.8	50.0	-4.1	-40.8	0.1
				Earthquake Y Mode 4	0.1	-0.1	0.3	-0.1	0.2	-0.0	0.1	0.1	-0.3	-0.1	0.2	-0.0
				Earthquake Y Mode 5	-0.5	0.3	0.1	0.3	0.1	-0.0	-0.5	-0.5	-0.2	0.3	0.1	-0.0
				Earthquake Y Mode 6	0.3	-0.3	-3.0	-0.3	-2.8	0.0	0.3	0.4	4.1	-0.3	-2.8	0.0
				Earthquake Y Mode 7	0.0	0.0	-0.1	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.0	0.2	0.6	0.0	0.3	-0.0	-0.0	0.1	-0.1	0.0	0.3	-0.0
				Earthquake Y Mode 9	0.0	0.1	-0.0	0.0	-0.0	-0.0	0.0	0.1	0.0	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.50	Self weight	687.2	-13.6	1.7	-14.7	2.3	0.0	671.9	23.2	-4.0	-14.7	2.3	0.0	0.0
				Dead load	187.8	-1.8	0.1	-1.9	0.3	0.0	187.8	3.0	-0.5	-1.9	0.3	0.0
				Live load	298.7	-7.8	1.1	-8.4	1.4	0.0	298.7	13.3	-2.6	-8.4	1.4	0.0
				Wind +X ecc.+	-3.4	-2.7	-0.1	-1.6	-0.0	0.0	-3.4	1.3	0.0	-1.6	-0.0	0.0
				Wind +X ecc.-	-3.4	-2.7	1.1	-1.6	0.8	-0.0	-3.4	1.3	-0.8	-1.6	0.8	-0.0
				Wind -X ecc.+	3.4	2.7	0.1	1.6	0.0	-0.0	3.4	-1.3	-0.0	1.6	0.0	-0.0
				Wind -X ecc.-	3.4	2.7	-1.1	1.6	-0.8	0.0	3.4	-1.3	0.8	1.6	-0.8	0.0
				Wind +Y ecc.+	0.4	0.0	-4.9	0.0	-3.3	-0.0	0.4	0.0	3.4	0.0	-3.3	-0.0
				Wind +Y ecc.-	0.6	-0.0	-10.4	-0.0	-7.0	0.0	0.6	0.0	7.2	-0.0	-7.0	0.0
				Wind -Y ecc.+	-0.4	-0.0	4.9	-0.0	3.3	0.0	-0.4	-0.0	-3.4	-0.0	3.3	0.0
				Wind -Y ecc.-	-0.6	0.0	10.4	0.0	7.0	-0.0	-0.6	-0.0	-7.2	0.0	7.0	-0.0
				Earthquake X Mode 1	-11.2	-6.9	16.3	-4.0	10.9	-0.1	-11.2	3.0	-11.0	-4.0	10.9	-0.1
				Earthquake X Mode 2	41.4	27.4	3.1	15.7	2.1	-0.1	41.4	-11.9	-2.1	15.7	2.1	-0.1
				Earthquake X Mode 3	-0.8	-0.9	-8.2	-0.5	-5.5	0.0	-0.8	0.4	5.5	-0.5	-5.5	0.0
				Earthquake X Mode 4	0.4	-0.8	2.6	-0.5	1.8	-0.0	0.4	0.5	-1.9	-0.5	1.8	-0.0
				Earthquake X Mode 5	-1.9	3.9	1.2	2.4	0.8	-0.0	-1.9	-2.2	-0.9	2.4	0.8	-0.0
				Earthquake X Mode 6	0.0	-0.1	-0.8	-0.0	-0.5	0.0	0.0	0.0	0.6	-0.0	-0.5	0.0
				Earthquake X Mode 7	-0.0	-0.2	0.9	-0.1	0.7	-0.0	-0.0	0.2	-0.8	-0.1	0.7	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.6	-0.1	-0.5	0.0	-0.0	0.2	0.5	-0.1	-0.5	0.0
				Earthquake X Mode 9	-0.1	-1.2	-0.1	-0.8	-0.0	0.0	-0.1	0.9	0.1	-0.8	-0.0	0.0
				Earthquake Y Mode 1	-5.1	-3.2	7.4	-1.8	4.9	-0.0	-5.1	1.4	-5.0	-1.8	4.9	-0.0
				Earthquake Y Mode 2	12.8	8.5	1.0	4.9	0.6	-0.0	12.8	-3.7	-0.7	4.9	0.6	-0.0



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C17	techo	50x50	12.00/14.40	Self weight	99.9	30.2	-3.1	22.0	-2.0	0.0	85.2	-22.6	1.8	22.0	-2.0	0.0
				Dead load	51.1	17.1	0.6	14.8	0.5	-0.0	51.1	-18.4	-0.7	14.8	0.5	-0.0
				Live load	17.0	13.4	-1.0	8.7	-0.6	0.0	17.0	-7.5	0.6	8.7	-0.6	0.0
				Wind +X ecc.+	-0.2	-0.5	-0.1	-0.4	-0.0	0.0	-0.2	0.5	0.0	-0.4	-0.0	0.0
				Wind +X ecc.-	-0.1	-0.4	0.6	-0.4	0.4	-0.0	-0.1	0.5	-0.4	-0.4	0.4	-0.0
				Wind -X ecc.+	0.2	0.5	0.1	0.4	0.0	-0.0	0.2	-0.5	-0.0	0.4	0.0	-0.0
				Wind -X ecc.-	0.1	0.4	-0.6	0.4	-0.4	0.0	0.1	-0.5	0.4	0.4	-0.4	0.0
				Wind +Y ecc.+	0.1	0.2	-0.2	0.2	-0.1	-0.0	0.1	-0.2	0.2	0.2	-0.1	-0.0
				Wind +Y ecc.-	0.0	0.0	-3.2	-0.0	-2.2	0.0	0.0	0.0	2.0	-0.0	-2.2	0.0
				Wind -Y ecc.+	-0.1	-0.2	0.2	-0.2	0.1	0.0	-0.1	0.2	-0.2	-0.2	0.1	0.0
				Wind -Y ecc.-	-0.0	-0.0	3.2	0.0	2.2	-0.0	-0.0	-0.0	-2.0	0.0	2.2	-0.0
				Earthquake X Mode 1	0.1	-0.4	14.8	-0.4	10.0	-0.1	0.1	0.5	-9.1	-0.4	10.0	-0.1
				Earthquake X Mode 2	3.0	8.3	8.3	6.9	5.5	-0.1	3.0	-8.4	-4.9	6.9	5.5	-0.1
				Earthquake X Mode 3	-0.1	-0.3	-4.1	-0.3	-2.8	0.0	-0.1	0.3	2.5	-0.3	-2.8	0.0
				Earthquake X Mode 4	-0.2	0.1	-4.4	0.1	-2.9	0.0	-0.2	-0.1	2.4	0.1	-2.9	0.0
				Earthquake X Mode 5	-1.0	-2.9	-2.8	-2.0	-1.8	0.0	-1.0	1.9	1.5	-2.0	-1.8	0.0
				Earthquake X Mode 6	0.1	0.1	0.7	0.0	0.5	-0.0	0.1	-0.0	-0.4	0.0	0.5	-0.0
				Earthquake X Mode 7	0.1	0.0	1.7	0.0	1.0	-0.0	0.1	-0.0	-0.7	0.0	1.0	-0.0
				Earthquake X Mode 8	-0.1	-0.2	-0.7	-0.1	-0.4	-0.0	-0.1	0.1	0.3	-0.1	-0.4	-0.0
				Earthquake X Mode 9	-0.3	-1.3	-0.5	-0.7	-0.3	0.0	-0.3	0.5	0.2	-0.7	-0.3	0.0
				Earthquake Y Mode 1	0.0	-0.2	6.7	-0.2	4.5	-0.0	0.0	0.2	-4.1	-0.2	4.5	-0.0
				Earthquake Y Mode 2	0.9	2.6	2.6	2.1	1.7	-0.0	0.9	-2.6	-1.5	2.1	1.7	-0.0
				Earthquake Y Mode 3	-0.8	-1.8	-25.3	-1.6	-17.1	0.0	-0.8	1.9	15.6	-1.6	-17.1	0.0
				Earthquake Y Mode 4	-0.0	0.0	-0.9	0.0	-0.6	0.0	-0.0	-0.0	0.5	0.0	-0.6	0.0
				Earthquake Y Mode 5	-0.2	-0.5	-0.5	-0.4	-0.3	0.0	-0.2	0.3	0.3	-0.4	-0.3	0.0
				Earthquake Y Mode 6	0.4	0.4	6.0	0.3	3.9	-0.0	0.4	-0.3	-3.3	0.3	3.9	-0.0
				Earthquake Y Mode 7	0.0	0.0	0.5	0.0	0.3	-0.0	0.0	-0.0	-0.2	0.0	0.3	-0.0
				Earthquake Y Mode 8	-0.2	-0.5	-1.6	-0.3	-1.0	-0.0	-0.2	0.2	0.7	-0.3	-1.0	-0.0
				Earthquake Y Mode 9	-0.1	-0.5	-0.2	-0.3	-0.1	0.0	-0.1	0.2	0.1	-0.3	-0.1	0.0
	Floor 4	50x50	9.00/11.40	Self weight	201.8	24.2	-1.2	19.8	-0.9	0.0	187.0	-23.4	1.0	19.8	-0.9	0.0
				Dead load	79.9	3.9	-0.8	2.2	-0.8	-0.0	79.9	-1.4	1.1	2.2	-0.8	-0.0
				Live load	56.0	14.9	-1.1	12.7	-0.9	0.0	56.0	-15.4	1.1	12.7	-0.9	0.0
				Wind +X ecc.+	-0.8	-0.8	-0.1	-0.8	-0.1	0.0	-0.8	1.2	0.1	-0.8	-0.1	0.0
				Wind +X ecc.-	-0.7	-0.7	1.2	-0.7	1.0	-0.0	-0.7	1.1	-1.3	-0.7	1.0	-0.0
				Wind -X ecc.+	0.8	0.8	0.1	0.8	0.1	-0.0	0.8	-1.2	-0.1	0.8	0.1	-0.0
				Wind -X ecc.-	0.7	0.7	-1.2	0.7	-1.0	0.0	0.7	-1.1	1.3	0.7	-1.0	0.0
				Wind +Y ecc.+	0.3	0.3	-0.9	0.3	-0.8	-0.0	0.3	-0.4	1.1	0.3	-0.8	-0.0
				Wind +Y ecc.-	-0.3	-0.1	-6.6	-0.1	-5.9	0.0	-0.3	0.2	7.5	-0.1	-5.9	0.0
				Wind -Y ecc.+	-0.3	-0.3	0.9	-0.3	0.8	0.0	-0.3	0.4	-1.1	-0.3	0.8	0.0
				Wind -Y ecc.-	0.3	0.1	6.6	0.1	5.9	-0.0	0.3	-0.2	-7.5	0.1	5.9	-0.0
				Earthquake X Mode 1	0.7	-0.7	26.1	-0.7	22.8	-0.1	0.7	1.0	-28.6	-0.7	22.8	-0.1
				Earthquake X Mode 2	13.5	13.2	13.0	12.9	11.2	-0.1	13.5	-17.7	-13.9	12.9	11.2	-0.1
				Earthquake X Mode 3	-0.8	-0.5	-7.5	-0.5	-6.6	0.0	-0.8	0.7	8.3	-0.5	-6.6	0.0
				Earthquake X Mode 4	-0.5	0.1	-5.3	0.1	-4.1	0.0	-0.5	-0.1	4.6	0.1	-4.1	0.0
				Earthquake X Mode 5	-3.1	-3.5	-3.0	-2.2	-2.3	0.0	-3.1	1.7	2.5	-2.2	-2.3	0.0
				Earthquake X Mode 6	0.2	0.1	0.9	0.0	0.7	-0.0	0.2	-0.0	-0.8	0.0	0.7	-0.0
				Earthquake X Mode 7	0.2	-0.0	0.1	-0.0	-0.1	0.0	0.2	0.0	0.4	-0.0	-0.1	0.0
				Earthquake X Mode 8	-0.1	-0.0	-0.1	0.0	-0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.0	0.0
				Earthquake X Mode 9	-0.5	-0.3	0.1	0.2	0.1	-0.0	-0.5	-0.7	-0.2	0.2	0.1	-0.0
				Earthquake Y Mode 1	0.3	-0.3	11.8	-0.3	10.3	-0.1	0.3	0.5	-13.0	-0.3	10.3	-0.1
				Earthquake Y Mode 2	4.2	4.1	4.0	4.0	3.5	-0.0	4.2	-5.5	-4.3	4.0	3.5	-0.0
				Earthquake Y Mode 3	-5.1	-3.1	-46.1	-3.1	-40.5	0.1	-5.1	4.4	51.0	-3.1	-40.5	0.1
				Earthquake Y Mode 4	-0.1	0.0	-1.0	0.0	-0.8	0.0	-0.1	-0.0	0.9	0.0	-0.8	0.0
				Earthquake Y Mode 5	-0.6	-0.6	-0.5	-0.4	-0.4	0.0	-0.6	0.3	0.5	-0.4	-0.4	0.0
				Earthquake Y Mode 6	1.3	0.6	7.7	0.4	6.1	-0.0	1.3	-0.3	-6.9	0.4	6.1	-0.0
				Earthquake Y Mode 7	0.1	-0.0	0.0	-0.0	-0.0	0.0	0.1	0.0	0.1	-0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.4	-0.1	-0.3	0.0	-0.0	0.0	-0.4	-0.2	-0.2	0.0	-0.0	0.0
				Earthquake Y Mode 9	-0.2	-0.1	0.0	0.1	0.1	-0.0	-0.2	-0.3	-0.1	0.1	0.1	-0.0
Floor 3	50x50	6.00/8.40	Self weight	302.2	23.1	-1.4	19.8	-1.3	0.0	287.5	-24.3	1.6	19.8	-1.3	0.0	
				Dead load	106.2	5.6	-0.4	5.1	-0.3	-0.0	106.2	-6.6	0.4	5.1	-0.3	-0.0
				Live load	94.3	13.4	-0.9	11.4	-0.8	0.0	94.3	-13.8	1.0	11.4	-0.8	0.0
				Wind +X ecc.+	-1.7	-1.2	-0.1	-1.2	-0.1	0.0	-1.7	1.5	0.1	-1.2	-0.1	0.0
				Wind +X ecc.-	-1.4	-1.1	1.6	-1.0	1.4	-0.0	-1.4	1.4	-1.7	-1.0	1.4	-0.0
				Wind -X ecc.+	1.7	1.2	0.1	1.2	0.1	-0.0	1.7	-1.5	-0.1	1.2	0.1	-0.0
				Wind -X ecc.-	1.4	1.1	-1.6	1.0	-1.4	0.0	1.4	-1.4	1.7	1.0	-1.4	0.0
				Wind +Y ecc.+	0.6	0.4	-1.5	0.4	-1.4	-0.0	0.6	-0.5	1.8	0.4	-1.4	-0.0
				Wind +Y ecc.-	-0.9	-0.2	-9.4	-0.2	-8.1	0.0	-0.9	0.3	10.2	-0.2	-8.1	0.0
				Wind -Y ecc.+	-0.6	-0.4	1.5	-0.4	1.4	0.0	-0.6	0.5	-1.8	-0.4	1.4	0.0
				Wind -Y ecc.-	0.9	0.2	9.4	0.2	8.1	-0.0	0.9	-0.3	-10.2	0.2	8.1	-0.0
				Earthquake X Mode 1	1.6	-1.1	32.8	-0.9	27.8	-0.2	1.6	1.2	-34.0	-0.9	27.8	-0.2
				Earthquake X Mode 2	27.6	18.4	15.1	16.1	12.7	-0.1	27.6	-20.2	-15.3	16.1	12.7	-0.1
				Earthquake X Mode 3	-1.8	-0.7	-9.6	-0.6	-8.1	0.0	-1.8	0.8	10.0	-0.6	-8.1	0.0
				Earthquake X Mode 4	-0.7	0.1	-1.9	0.0	-1.1	0.0	-0.7	0.0	0.7	0.0	-1.1	0.0
				Earthquake X Mode 5	-4.0	-1.8	-0.9	-0.4	-0.4	0.0	-4.0	-0.8	0.2	-0.4	-0.4	0.0
				Earthquake X Mode 6	0.2	0.0	0.4	0.0	0.2	-0.0	0.2	0.0	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 7	0.1	-0.0	-1.8	-0.0	-1.5	0.0	0.1	0.0	1.7	-0.0	-1.5	0.0
				Earthquake X Mode 8	-0.0	0.2	0.7	0.1	0.6	0.0	-0.0	-0.1	-0.7	0.1	0.6	0.0
				Earthquake X Mode 9	-0.0	1.2	0.6	0.9	0.4	-0.0	-0.0	-0.9	-0.5	0.9	0.4	-0.0
				Earthquake Y Mode 1	0.7	-0.5	14.9	-0.4	12.6	-0.1	0.7	0.5	-15.4	-0.4	12.6	-0.1
				Earthquake Y Mode 2	8.5	5.7	4.7	5.0	3.9	-0.0	8.5	-6.2	-4.7	5.0	3.9	-0.0
				Earthquake Y Mode 3	-11.4	-4.5	-58.9	-4.0	-50.2	0.1	-11.4	5.1	61.5	-4.0	-50.2	0.1
				Earthquake Y Mode 4	-0.1	0.0	-0.4</									



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	50x50	3.00/5.40	Self weight	400.5	22.5	-1.6	18.5	-1.4	0.0	385.8	-21.9	1.7	18.5	-1.4	0.0
				Dead load	131.4	4.2	-0.4	3.5	-0.3	0.0	131.4	-4.2	0.4	3.5	-0.3	0.0
				Live load	131.5	13.5	-1.1	11.1	-0.9	0.0	131.5	-13.2	1.1	11.1	-0.9	0.0
				Wind +X ecc.+	-2.9	-1.7	-0.1	-1.4	-0.1	0.0	-2.9	1.5	0.1	-1.4	-0.1	0.0
				Wind +X ecc.-	-2.3	-1.6	2.0	-1.2	1.7	-0.0	-2.3	1.4	-2.0	-1.2	1.7	-0.0
				Wind -X ecc.+	2.9	1.7	0.1	1.4	0.1	-0.0	2.9	-1.5	-0.1	1.4	0.1	-0.0
				Wind -X ecc.-	2.3	1.6	-2.0	1.2	-1.7	0.0	2.3	-1.4	2.0	1.2	-1.7	0.0
				Wind +Y ecc.+	0.8	0.6	-2.5	0.4	-2.1	-0.0	0.8	-0.4	2.6	0.4	-2.1	-0.0
				Wind +Y ecc.-	-1.9	-0.3	-12.4	-0.3	-10.3	0.0	-1.9	0.4	12.3	-0.3	-10.3	0.0
				Wind -Y ecc.+	-0.8	-0.6	2.5	-0.4	2.1	0.0	-0.8	0.4	-2.6	-0.4	2.1	0.0
				Wind -Y ecc.-	1.9	0.3	12.4	0.3	10.3	-0.0	1.9	-0.4	-12.3	0.3	10.3	-0.0
				Earthquake X Mode 1	3.1	-1.4	37.0	-1.0	30.0	-0.2	3.1	1.0	-35.1	-1.0	30.0	-0.2
				Earthquake X Mode 2	43.3	22.9	16.0	17.1	12.9	-0.1	43.3	-18.1	-14.9	17.1	12.9	-0.1
				Earthquake X Mode 3	-3.2	-0.9	-11.2	-0.7	-9.1	0.0	-3.2	0.8	10.8	-0.7	-9.1	0.0
				Earthquake X Mode 4	-0.5	-0.0	2.6	-0.0	2.5	-0.0	-0.5	0.1	-3.3	-0.0	2.5	-0.0
				Earthquake X Mode 5	-3.3	1.3	1.7	1.6	1.5	-0.0	-3.3	-2.7	-2.0	1.6	1.5	-0.0
				Earthquake X Mode 6	0.2	-0.0	-0.4	-0.0	-0.4	0.0	0.2	0.1	0.6	-0.0	-0.4	0.0
				Earthquake X Mode 7	-0.0	-0.0	-0.5	-0.0	-0.2	0.0	-0.0	-0.0	0.0	-0.0	-0.2	0.0
				Earthquake X Mode 8	0.0	0.1	0.3	0.0	0.1	-0.0	0.0	0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 9	0.2	0.5	0.1	0.1	-0.0	-0.0	0.2	0.4	0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	1.4	-0.6	16.8	-0.4	13.6	-0.1	1.4	0.5	-15.9	-0.4	13.6	-0.1
				Earthquake Y Mode 2	13.4	7.1	4.9	5.3	4.0	-0.0	13.4	-5.6	-4.6	5.3	4.0	-0.0
				Earthquake Y Mode 3	-19.4	-5.7	-68.7	-4.4	-56.2	0.1	-19.4	5.0	66.2	-4.4	-56.2	0.1
				Earthquake Y Mode 4	-0.1	-0.0	0.5	-0.0	0.5	-0.0	-0.1	0.0	-0.6	-0.0	0.5	-0.0
				Earthquake Y Mode 5	-0.6	0.2	0.3	0.3	0.3	-0.0	-0.6	-0.5	-0.4	0.3	0.3	-0.0
				Earthquake Y Mode 6	1.4	-0.1	-3.6	-0.2	-3.5	0.0	1.4	0.4	4.8	-0.2	-3.5	0.0
				Earthquake Y Mode 7	-0.0	-0.0	-0.1	-0.0	-0.1	0.0	-0.0	-0.0	0.0	-0.0	-0.1	0.0
				Earthquake Y Mode 8	0.1	0.2	0.6	0.0	0.3	-0.0	0.1	0.1	-0.2	0.0	0.3	-0.0
				Earthquake Y Mode 9	0.1	0.2	0.0	0.0	-0.0	-0.0	0.1	0.1	0.0	0.0	-0.0	-0.0
	Floor 1	50x50	0.00/2.40	Self weight	496.2	10.4	-1.4	11.8	-1.0	0.0	481.5	-17.9	1.0	11.8	-1.0	0.0
				Dead load	155.4	1.9	-0.3	2.2	-0.1	0.0	155.4	-3.3	0.1	2.2	-0.1	0.0
				Live load	167.2	6.3	-0.9	7.1	-0.7	0.0	167.2	-10.7	0.7	7.1	-0.7	0.0
				Wind +X ecc.+	-3.9	-2.5	-0.1	-1.3	-0.1	0.0	-3.9	0.7	0.1	-1.3	-0.1	0.0
				Wind +X ecc.-	-3.1	-2.2	2.0	-1.2	1.4	-0.0	-3.1	0.6	-1.4	-1.2	1.4	-0.0
				Wind -X ecc.+	3.9	2.5	0.1	1.3	0.1	-0.0	3.9	-0.7	-0.1	1.3	0.1	-0.0
				Wind -X ecc.-	3.1	2.2	-2.0	1.2	-1.4	0.0	3.1	-0.6	1.4	1.2	-1.4	0.0
				Wind +Y ecc.+	0.8	0.6	-3.6	0.3	-2.6	-0.0	0.8	-0.1	2.7	0.3	-2.6	-0.0
				Wind +Y ecc.-	-3.2	-0.8	-13.3	-0.5	-9.6	0.0	-3.2	0.3	9.7	-0.5	-9.6	0.0
				Wind -Y ecc.+	-0.8	-0.6	3.6	-0.3	2.6	0.0	-0.8	0.1	-2.7	-0.3	2.6	0.0
				Wind -Y ecc.-	3.2	0.8	13.3	0.5	9.6	-0.0	3.2	-0.3	-9.7	0.5	9.6	-0.0
				Earthquake X Mode 1	5.0	-1.4	31.6	-0.7	22.4	-0.1	5.0	0.2	-22.1	-0.7	22.4	-0.1
				Earthquake X Mode 2	56.4	27.7	12.2	14.3	8.6	-0.1	56.4	-6.7	-8.4	14.3	8.6	-0.1
				Earthquake X Mode 3	-4.5	-1.4	-10.5	-0.7	-7.5	0.0	-4.5	0.4	7.5	-0.7	-7.5	0.0
				Earthquake X Mode 4	-0.2	-0.1	4.6	-0.0	3.4	-0.0	-0.2	0.0	-3.6	-0.0	3.4	-0.0
				Earthquake X Mode 5	-1.6	4.1	2.6	2.4	1.9	-0.0	-1.6	-1.7	-2.0	2.4	1.9	-0.0
				Earthquake X Mode 6	0.1	-0.1	-0.9	-0.1	-0.7	0.0	0.1	0.0	0.7	-0.1	-0.7	0.0
				Earthquake X Mode 7	0.1	0.0	1.5	0.0	1.2	-0.0	0.1	-0.0	-1.3	0.0	1.2	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.7	-0.1	-0.5	0.0	-0.0	0.1	0.6	-0.1	-0.5	0.0
				Earthquake X Mode 9	-0.0	-1.3	-0.4	-0.9	-0.3	0.0	-0.0	0.8	0.4	-0.9	-0.3	0.0
				Earthquake Y Mode 1	2.3	-0.6	14.3	-0.3	10.1	-0.0	2.3	0.1	-10.0	-0.3	10.1	-0.0
				Earthquake Y Mode 2	17.4	8.6	3.8	4.4	2.6	-0.0	17.4	-2.1	-2.6	4.4	2.6	-0.0
				Earthquake Y Mode 3	-27.9	-8.4	-64.6	-4.5	-46.1	0.1	-27.9	2.5	46.0	-4.5	-46.1	0.1
				Earthquake Y Mode 4	-0.0	-0.0	0.9	-0.0	0.7	-0.0	-0.0	0.0	-0.7	-0.0	0.7	-0.0
				Earthquake Y Mode 5	-0.3	0.7	0.5	0.4	0.4	-0.0	-0.3	-0.3	-0.4	0.4	0.4	-0.0
				Earthquake Y Mode 6	0.5	-0.8	-7.4	-0.5	-5.5	0.0	0.5	0.4	5.8	-0.5	-5.5	0.0
				Earthquake Y Mode 7	0.0	0.0	0.5	0.0	0.4	-0.0	0.0	-0.0	-0.4	0.0	0.4	-0.0
				Earthquake Y Mode 8	-0.1	-0.5	-1.7	-0.3	-1.3	0.0	-0.1	0.3	1.5	-0.3	-1.3	0.0
				Earthquake Y Mode 9	-0.0	-0.5	-0.2	-0.3	-0.1	0.0	-0.0	0.3	0.1	-0.3	-0.1	0.0
C18	techo	40x30	12.00/14.50	Self weight	157.8	-0.7	-3.1	-0.6	-2.5	0.0	150.5	0.8	3.2	-0.6	-2.5	0.0
				Dead load	160.6	-0.7	-1.9	-0.7	-2.0	-0.0	160.6	1.0	3.1	-0.7	-2.0	-0.0
				Live load	27.5	-0.3	-0.9	-0.2	-0.6	0.0	27.5	0.1	0.6	-0.2	-0.6	0.0
				Wind +X ecc.+	0.1	-0.7	-0.0	-0.4	-0.0	0.0	0.1	0.4	0.0	-0.4	-0.0	0.0
				Wind +X ecc.-	0.1	-0.6	0.1	-0.4	0.1	-0.0	0.1	0.3	-0.1	-0.4	0.1	-0.0
				Wind -X ecc.+	-0.1	0.7	0.0	0.4	0.0	-0.0	-0.1	-0.4	-0.0	0.4	0.0	-0.0
				Wind -X ecc.-	-0.1	0.6	-0.1	0.4	-0.1	0.0	-0.1	-0.3	0.1	0.4	-0.1	0.0
				Wind +Y ecc.+	-0.2	0.3	-0.1	0.2	-0.1	-0.0	-0.2	-0.1	0.1	0.2	-0.1	-0.0
				Wind +Y ecc.-	-0.2	-0.1	-0.5	-0.1	-0.3	0.0	-0.2	0.1	0.4	-0.1	-0.3	0.0
				Wind -Y ecc.+	0.2	-0.3	0.1	-0.2	0.1	0.0	0.2	0.1	-0.1	-0.2	0.1	0.0
				Wind -Y ecc.-	0.2	0.1	0.5	0.1	0.3	-0.0	0.2	-0.1	-0.4	0.1	0.3	-0.0
				Earthquake X Mode 1	0.2	-0.6	1.9	-0.3	1.2	-0.0	0.2	0.3	-1.2	-0.3	1.2	-0.0
				Earthquake X Mode 2	-1.5	11.4	0.9	6.8	0.6	-0.0	-1.5	-5.6	-0.6	6.8	0.6	-0.0
				Earthquake X Mode 3	-0.1	-0.5	-0.7	-0.3	-0.4	0.0	-0.1	0.2	0.4	-0.3	-0.4	0.0
				Earthquake X Mode 4	-0.1	0.1	-0.6	0.0	-0.4	0.0	-0.1	-0.0	0.3	0.0	-0.4	0.0
				Earthquake X Mode 5	0.8	-2.5	-0.4	-1.5	-0.2	0.0	0.8	1.2	0.2	-1.5	-0.2	0.0
				Earthquake X Mode 6	-0.0	0.0	0.1	0.0	0.1	-0.0	-0.0	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 7	0.0	0.0	0.2	0.0	0.1	-0.0	0.0	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 8	0.0	-0.1	-0.1	-0.1	-0.1	-0.0	0.0	0.0	0.1	-0.1	-0.1	-0.0
				Earthquake X Mode 9	0.3	-0.6	-0.1	-0.4	-0.0	0.0	0.3	0.3	0.0	-0.4	-0.0	0.0
				Earthquake Y Mode 1	0.1	-0.3	0.8	-0.2	0.6	-0.0	0.1	0.1	-0.5	-0.2	0.6	-0.0
				Earthquake Y Mode 2	-0.5	3.5	0.3	2.1	0.2	-0.0	-0.5	-1.7	-0.2	2.1	0.2	-0.0
				Earthquake Y Mode 3	-0.7	-2.8	-4.1	-1.7	-2.7	0.0	-0.7	1.4	2.6	-1.7	-2.7	0.0
				Earthquake Y Mode 4	-0.0	0.0										



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 4	40x30	9.00/11.50	Self weight	281.9	-0.2	-0.9	-0.1	-0.6	0.0	0.0	274.5	0.1	0.6	-0.1	-0.6	0.0
				Dead load	167.4	0.0	1.1	0.1	1.0	-0.0	167.4	-0.2	-1.5	0.1	1.0	-0.0
				Live load	101.1	-0.4	-0.9	-0.3	-0.7	0.0	101.1	0.4	0.9	-0.3	-0.7	0.0
				Wind +X ecc.+	0.1	-1.4	-0.0	-1.1	-0.0	0.0	0.1	1.4	0.0	-1.1	-0.0	0.0
				Wind +X ecc.-	0.2	-1.2	0.1	-1.0	0.1	-0.0	0.2	1.3	-0.2	-1.0	0.1	-0.0
				Wind -X ecc.+	-0.1	1.4	0.0	1.1	0.0	-0.0	-0.1	-1.4	-0.0	1.1	0.0	-0.0
				Wind -X ecc.-	-0.2	1.2	-0.1	1.0	-0.1	0.0	-0.2	-1.3	0.2	1.0	-0.1	0.0
				Wind +Y ecc.+	-0.2	0.5	-0.3	0.4	-0.3	-0.0	-0.2	-0.5	0.4	0.4	-0.3	-0.0
				Wind +Y ecc.-	-0.2	-0.2	-1.1	-0.2	-0.9	0.0	-0.2	0.2	1.2	-0.2	-0.9	0.0
				Wind -Y ecc.+	0.2	-0.5	0.3	-0.4	0.3	0.0	0.2	0.5	-0.4	-0.4	0.3	0.0
				Wind -Y ecc.-	0.2	0.2	1.1	0.2	0.9	-0.0	0.2	-0.2	-1.2	0.2	0.9	-0.0
				Earthquake X Mode 1	0.4	-1.2	3.3	-0.9	2.8	-0.0	0.4	1.2	-3.7	-0.9	2.8	-0.0
				Earthquake X Mode 2	-3.0	20.7	1.5	16.8	1.2	-0.0	-3.0	-21.3	-1.6	16.8	1.2	-0.0
				Earthquake X Mode 3	-0.1	-0.8	-1.2	-0.7	-1.0	0.0	-0.1	0.9	1.3	-0.7	-1.0	0.0
				Earthquake X Mode 4	-0.1	0.1	-0.7	0.1	-0.5	0.0	-0.1	-0.1	0.6	0.1	-0.5	0.0
				Earthquake X Mode 5	1.3	-3.0	-0.4	-2.3	-0.3	0.0	1.3	2.9	0.3	-2.3	-0.3	0.0
				Earthquake X Mode 6	-0.0	0.1	0.2	0.0	0.1	-0.0	-0.0	-0.1	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 7	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake X Mode 8	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0
				Earthquake X Mode 9	0.4	0.1	0.0	0.1	0.0	-0.0	0.4	-0.1	-0.0	0.1	0.0	-0.0
				Earthquake Y Mode 1	0.2	-0.5	1.5	-0.4	1.3	-0.0	0.2	0.5	-1.7	-0.4	1.3	-0.0
				Earthquake Y Mode 2	-0.9	6.4	0.5	5.2	0.4	-0.0	-0.9	-6.6	-0.5	5.2	0.4	-0.0
				Earthquake Y Mode 3	-0.9	-5.2	-7.5	-4.2	-6.3	0.0	-0.9	5.3	8.3	-4.2	-6.3	0.0
				Earthquake Y Mode 4	-0.0	0.0	-0.1	0.0	-0.1	0.0	-0.0	-0.0	0.1	0.0	-0.1	0.0
				Earthquake Y Mode 5	0.2	-0.5	-0.1	-0.4	-0.1	0.0	0.2	0.5	0.1	-0.4	-0.1	0.0
				Earthquake Y Mode 6	-0.0	0.5	1.3	0.4	1.0	-0.0	-0.0	-0.5	-1.2	0.4	1.0	-0.0
				Earthquake Y Mode 7	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake Y Mode 8	0.1	0.0	-0.0	0.0	0.0	0.0	0.1	-0.0	-0.0	0.0	0.0	0.0
				Earthquake Y Mode 9	0.1	0.0	0.0	0.0	0.0	-0.0	0.1	-0.0	-0.0	0.0	0.0	-0.0
Floor 3	40x30	6.00/8.50	Self weight	411.5	-0.4	-1.1	-0.3	-0.9	0.0	0.0	404.2	0.4	1.2	-0.3	-0.9	0.0
				Dead load	180.5	-0.2	0.7	-0.2	0.5	-0.0	180.5	0.3	-0.6	-0.2	0.5	-0.0
				Live load	176.0	-0.5	-0.8	-0.4	-0.7	0.0	176.0	0.4	0.8	-0.4	-0.7	0.0
				Wind +X ecc.+	0.3	-1.8	-0.0	-1.4	-0.0	0.0	0.3	1.8	0.0	-1.4	-0.0	0.0
				Wind +X ecc.-	0.3	-1.6	0.2	-1.3	0.2	-0.0	0.3	1.6	-0.2	-1.3	0.2	-0.0
				Wind -X ecc.+	-0.3	1.8	0.0	1.4	0.0	-0.0	-0.3	-1.8	-0.0	1.4	0.0	-0.0
				Wind -X ecc.-	-0.3	1.6	-0.2	1.3	-0.2	0.0	-0.3	-1.6	0.2	1.3	-0.2	0.0
				Wind +Y ecc.+	-0.3	0.6	-0.5	0.4	-0.4	-0.0	-0.3	-0.6	0.5	0.4	-0.4	-0.0
				Wind +Y ecc.-	-0.3	-0.3	-1.5	-0.3	-1.3	0.0	-0.3	0.3	1.6	-0.3	-1.3	0.0
				Wind -Y ecc.+	0.3	-0.6	0.5	-0.4	0.4	0.0	0.3	0.6	-0.5	-0.4	0.4	0.0
				Wind -Y ecc.-	0.3	0.3	1.5	0.3	1.3	-0.0	0.3	-0.3	-1.6	0.3	1.3	-0.0
				Earthquake X Mode 1	0.8	-1.4	4.2	-1.1	3.4	-0.0	0.8	1.4	-4.4	-1.1	3.4	-0.0
				Earthquake X Mode 2	-5.7	24.1	1.7	19.3	1.4	-0.0	-5.7	-24.2	-1.7	19.3	1.4	-0.0
				Earthquake X Mode 3	-0.1	-1.0	-1.5	-0.8	-1.3	0.0	-0.1	1.0	1.6	-0.8	-1.3	0.0
				Earthquake X Mode 4	-0.1	0.0	-0.3	0.0	-0.1	0.0	-0.1	-0.0	0.1	0.0	-0.1	0.0
				Earthquake X Mode 5	1.5	-0.7	-0.1	-0.5	-0.1	0.0	1.5	0.5	0.0	-0.5	-0.1	0.0
				Earthquake X Mode 6	-0.0	0.0	0.1	0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake X Mode 7	0.0	-0.0	-0.2	-0.0	-0.2	0.0	0.0	0.0	0.2	-0.0	-0.2	0.0
				Earthquake X Mode 8	0.0	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.1	0.1	0.1	0.0
				Earthquake X Mode 9	0.1	0.8	0.1	0.6	0.0	-0.0	0.1	-0.8	-0.1	0.6	0.0	-0.0
				Earthquake Y Mode 1	0.3	-0.6	1.9	-0.5	1.6	-0.0	0.3	0.6	-2.0	-0.5	1.6	-0.0
				Earthquake Y Mode 2	-1.8	7.5	0.5	6.0	0.4	-0.0	-1.8	-7.5	-0.5	6.0	0.4	-0.0
				Earthquake Y Mode 3	-0.8	-6.2	-9.5	-4.9	-7.8	0.0	-0.8	6.2	9.9	-4.9	-7.8	0.0
				Earthquake Y Mode 4	-0.0	0.0	-0.1	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0
				Earthquake Y Mode 5	0.3	-0.1	-0.0	-0.1	-0.0	0.0	0.3	0.1	0.0	-0.1	-0.0	0.0
				Earthquake Y Mode 6	-0.0	0.2	0.5	0.1	0.3	-0.0	-0.0	-0.1	-0.2	0.1	0.3	-0.0
				Earthquake Y Mode 7	0.0	-0.0	-0.1	-0.0	-0.1	0.0	0.0	0.0	0.1	-0.0	-0.1	0.0
				Earthquake Y Mode 8	0.0	0.3	0.3	0.2	0.3	0.0	0.0	-0.3	-0.3	0.2	0.3	0.0
				Earthquake Y Mode 9	0.0	0.3	0.0	0.2	0.0	-0.0	0.0	-0.3	-0.0	0.2	0.0	-0.0
Floor 2	40x30	3.00/5.50	Self weight	546.7	-0.7	-1.3	-0.5	-1.0	0.0	0.0	539.4	0.6	1.2	-0.5	-1.0	0.0
				Dead load	195.8	-0.3	0.8	-0.2	0.6	0.0	195.8	0.2	-0.8	-0.2	0.6	0.0
				Live load	253.7	-0.7	-0.9	-0.5	-0.7	0.0	253.7	0.6	0.9	-0.5	-0.7	0.0
				Wind +X ecc.+	0.6	-2.0	-0.0	-1.5	-0.0	0.0	0.6	1.9	0.0	-1.5	-0.0	0.0
				Wind +X ecc.-	0.6	-1.7	0.3	-1.4	0.2	-0.0	0.6	1.7	-0.3	-1.4	0.2	-0.0
				Wind -X ecc.+	-0.6	2.0	0.0	1.5	0.0	-0.0	-0.6	-1.9	-0.0	1.5	0.0	-0.0
				Wind -X ecc.-	-0.6	1.7	-0.3	1.4	-0.2	0.0	-0.6	-1.7	0.3	1.4	-0.2	0.0
				Wind +Y ecc.+	-0.5	0.6	-0.6	0.5	-0.5	-0.0	-0.5	-0.6	0.7	0.5	-0.5	-0.0
				Wind +Y ecc.-	-0.3	-0.4	-2.0	-0.3	-1.6	0.0	-0.3	0.4	2.0	-0.3	-1.6	0.0
				Wind -Y ecc.+	0.5	-0.6	0.6	-0.5	0.5	0.0	0.5	0.6	-0.7	-0.5	0.5	0.0
				Wind -Y ecc.-	0.3	0.4	2.0	0.3	1.6	-0.0	0.3	-0.4	-2.0	0.3	1.6	-0.0
				Earthquake X Mode 1	1.2	-1.4	4.8	-1.1	3.7	-0.0	1.2	1.4	-4.6	-1.1	3.7	-0.0
				Earthquake X Mode 2	-9.5	24.4	1.8	19.3	1.4	-0.0	-9.5	-23.9	-1.7	19.3	1.4	-0.0
				Earthquake X Mode 3	-0.1	-1.1	-1.8	-0.8	-1.4	0.0	-0.1	1.0	1.7	-0.8	-1.4	0.0
				Earthquake X Mode 4	-0.1	-0.1	0.3	-0.0	0.3	-0.0	-0.1	0.1	-0.4	-0.0	0.3	-0.0
				Earthquake X Mode 5	1.0	1.8	0.2	1.4	0.2	-0.0	1.0	-1.8	-0.3	1.4	0.2	-0.0
				Earthquake X Mode 6	0.0	-0.0	-0.1	-0.0	-0.1	0.0	0.0	0.0	0.1	-0.0	-0.1	0.0
				Earthquake X Mode 7	0.0	-0.0	-0.1	-0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake X Mode 8	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake X Mode 9	0.0	0.1	0.0	0.1	-0.0	-0.0	0.0	-0.1	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	0.5	-0.6	2.2	-0.5	1.7	-0.0	0.5	0.6	-2.1	-0.5	1.7	-0.0
				Earthquake Y Mode 2	-2.9	7.5	0.6	6.0	0.4	-0.0	-2.9	-7.4	-0.5	6.0	0.4	-0.0
				Earthquake Y Mode 3	-0.4	-6.5	-11.0									



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	40x30	0.00/2.50	Self weight	692.0	-0.4	-0.7	-0.4	-0.7	0.0	684.6	0.6	1.0	-0.4	-0.7	0.0
				Dead load	214.8	-0.1	0.4	-0.1	0.4	0.0	214.8	0.2	-0.7	-0.1	0.4	0.0
				Live load	336.9	-0.4	-0.5	-0.4	-0.5	0.0	336.9	0.5	0.7	-0.4	-0.5	0.0
				Wind +X ecc.+	1.0	-1.4	-0.0	-1.1	-0.0	0.0	1.0	1.3	0.0	-1.1	-0.0	0.0
				Wind +X ecc.-	1.0	-1.2	0.3	-0.9	0.2	-0.0	1.0	1.1	-0.2	-0.9	0.2	-0.0
				Wind -X ecc.+	-1.0	1.4	0.0	1.1	0.0	-0.0	-1.0	-1.3	-0.0	1.1	0.0	-0.0
				Wind -X ecc.-	-1.0	1.2	-0.3	0.9	-0.2	0.0	-1.0	-1.1	0.2	0.9	-0.2	0.0
				Wind +Y ecc.+	-0.6	0.3	-0.8	0.3	-0.5	-0.0	-0.6	-0.3	0.6	0.3	-0.5	-0.0
				Wind +Y ecc.-	-0.3	-0.4	-2.1	-0.3	-1.5	0.0	-0.3	0.4	1.6	-0.3	-1.5	0.0
				Wind -Y ecc.+	0.6	-0.3	0.8	-0.3	0.5	0.0	0.6	0.3	-0.6	-0.3	0.5	0.0
				Wind -Y ecc.-	0.3	0.4	2.1	0.3	1.5	-0.0	0.3	-0.4	-1.6	0.3	1.5	-0.0
				Earthquake X Mode 1	1.6	-0.8	4.2	-0.6	2.9	-0.0	1.6	0.7	-2.9	-0.6	2.9	-0.0
				Earthquake X Mode 2	-13.6	15.6	1.4	11.9	0.9	-0.0	-13.6	-14.2	-1.0	11.9	0.9	-0.0
				Earthquake X Mode 3	0.1	-0.7	-1.7	-0.6	-1.2	0.0	0.1	0.7	1.2	-0.6	-1.2	0.0
				Earthquake X Mode 4	-0.1	-0.1	0.6	-0.0	0.5	-0.0	-0.1	0.0	-0.5	-0.0	0.5	-0.0
				Earthquake X Mode 5	0.3	2.1	0.3	1.6	0.2	-0.0	0.3	-2.0	-0.3	1.6	0.2	-0.0
				Earthquake X Mode 6	0.0	-0.0	-0.1	-0.0	-0.1	0.0	0.0	0.0	0.1	-0.0	-0.1	0.0
				Earthquake X Mode 7	0.0	0.0	0.2	0.0	0.2	-0.0	0.0	-0.0	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 8	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	-0.1	-0.1	0.0
				Earthquake X Mode 9	0.2	-0.6	-0.0	-0.4	-0.0	0.0	0.2	0.6	0.0	-0.4	-0.0	0.0
				Earthquake Y Mode 1	0.7	-0.4	1.9	-0.3	1.3	-0.0	0.7	0.3	-1.3	-0.3	1.3	-0.0
				Earthquake Y Mode 2	-4.2	4.8	0.4	3.7	0.3	-0.0	-4.2	-4.4	-0.3	3.7	0.3	-0.0
				Earthquake Y Mode 3	0.5	-4.6	-10.3	-3.5	-7.1	0.0	0.5	4.2	7.4	-3.5	-7.1	0.0
				Earthquake Y Mode 4	-0.0	-0.0	0.1	-0.0	0.1	-0.0	-0.0	0.0	-0.1	-0.0	0.1	-0.0
				Earthquake Y Mode 5	0.1	0.4	0.1	0.3	0.0	-0.0	0.1	-0.4	-0.0	0.3	0.0	-0.0
				Earthquake Y Mode 6	0.2	-0.4	-1.2	-0.3	-0.9	0.0	0.2	0.4	1.0	-0.3	-0.9	0.0
				Earthquake Y Mode 7	0.0	0.0	0.1	0.0	0.0	-0.0	0.0	-0.0	-0.1	0.0	0.0	-0.0
				Earthquake Y Mode 8	0.0	-0.2	-0.3	-0.2	-0.2	0.0	0.0	0.2	0.3	-0.2	-0.2	0.0
				Earthquake Y Mode 9	0.1	-0.2	-0.0	-0.2	-0.0	0.0	0.1	0.2	0.0	-0.2	-0.0	0.0
C19	techo	50x50	12.00/14.40	Self weight	142.6	-16.4	0.1	-10.9	-0.0	0.0	127.9	9.7	0.2	-10.9	-0.0	0.0
				Dead load	112.3	-6.4	1.9	-4.7	1.6	-0.0	112.3	4.9	-2.0	-4.7	1.6	-0.0
				Live load	29.2	-7.4	0.5	-4.7	0.3	0.0	29.2	4.0	-0.1	-4.7	0.3	0.0
				Wind +X ecc.+	-0.5	-1.5	0.0	-1.0	0.0	0.0	-0.5	1.0	0.0	-1.0	0.0	0.0
				Wind +X ecc.-	-0.6	-1.4	0.3	-1.0	0.2	-0.0	-0.6	0.9	-0.2	-1.0	0.2	-0.0
				Wind -X ecc.+	0.5	1.5	-0.0	1.0	-0.0	-0.0	0.5	-1.0	-0.0	1.0	-0.0	-0.0
				Wind -X ecc.-	0.6	1.4	-0.3	1.0	-0.2	0.0	0.6	-0.9	0.2	1.0	-0.2	0.0
				Wind +Y ecc.+	1.0	1.1	-1.1	0.7	-0.8	-0.0	1.0	-0.6	0.7	0.7	-0.8	-0.0
				Wind +Y ecc.-	1.2	0.6	-2.6	0.4	-1.8	0.0	1.2	-0.3	1.7	0.4	-1.8	0.0
				Wind -Y ecc.+	-1.0	-1.1	1.1	-0.7	0.8	0.0	-1.0	0.6	-0.7	-0.7	0.8	0.0
				Wind -Y ecc.-	-1.2	-0.6	2.6	-0.4	1.8	-0.0	-1.2	0.3	-1.7	-0.4	1.8	-0.0
				Earthquake X Mode 1	-2.2	-2.3	6.9	-1.6	4.7	-0.1	-2.2	1.4	-4.3	-1.6	4.7	-0.1
				Earthquake X Mode 2	9.6	24.8	1.8	16.7	1.3	-0.1	9.6	-15.3	-1.3	16.7	1.3	-0.1
				Earthquake X Mode 3	0.9	-0.2	-3.2	-0.1	-2.2	0.0	0.9	0.1	2.1	-0.1	-2.2	0.0
				Earthquake X Mode 4	0.4	0.4	-2.4	0.2	-1.5	0.0	0.4	-0.2	1.3	0.2	-1.5	0.0
				Earthquake X Mode 5	-2.9	-6.1	-1.1	-4.0	-0.7	0.0	-2.9	3.4	0.6	-4.0	-0.7	0.0
				Earthquake X Mode 6	-0.0	0.1	0.6	0.0	0.4	-0.0	-0.0	-0.0	-0.4	0.0	0.4	-0.0
				Earthquake X Mode 7	-0.0	-0.0	1.0	-0.0	0.6	-0.0	-0.0	0.0	-0.4	-0.0	0.6	-0.0
				Earthquake X Mode 8	-0.1	-0.2	-0.6	-0.1	-0.4	-0.0	-0.1	0.1	0.3	-0.1	-0.4	-0.0
				Earthquake X Mode 9	-0.9	-1.8	-0.1	-1.1	-0.1	0.0	-0.9	0.8	0.0	-1.1	-0.1	0.0
				Earthquake Y Mode 1	-1.0	-1.1	3.2	-0.7	2.1	-0.0	-1.0	0.6	-2.0	-0.7	2.1	-0.0
				Earthquake Y Mode 2	3.0	7.7	0.6	5.2	0.4	-0.0	3.0	-4.7	-0.4	5.2	0.4	-0.0
				Earthquake Y Mode 3	5.8	-1.0	-19.8	-0.8	-13.5	0.0	5.8	0.8	12.7	-0.8	-13.5	0.0
				Earthquake Y Mode 4	0.1	0.1	-0.5	0.0	-0.3	0.0	0.1	-0.0	0.3	0.0	-0.3	0.0
				Earthquake Y Mode 5	-0.5	-1.1	-0.2	-0.7	-0.1	0.0	-0.5	0.6	0.1	-0.7	-0.1	0.0
				Earthquake Y Mode 6	-0.4	0.4	5.2	0.3	3.4	-0.0	-0.4	-0.2	-2.9	0.3	3.4	-0.0
				Earthquake Y Mode 7	-0.0	-0.0	0.3	-0.0	0.2	-0.0	-0.0	0.0	-0.1	-0.0	0.2	-0.0
				Earthquake Y Mode 8	-0.3	-0.6	-1.6	-0.4	-1.0	-0.0	-0.3	0.3	0.7	-0.4	-1.0	-0.0
				Earthquake Y Mode 9	-0.3	-0.7	-0.0	-0.4	-0.0	0.0	-0.3	0.3	0.0	-0.4	-0.0	0.0
	Floor 4	50x50	9.00/11.50	Self weight	281.2	-15.4	2.1	-12.5	1.8	0.0	265.9	16.0	-2.4	-12.5	1.8	0.0
				Dead load	130.1	-4.1	0.0	-3.3	-0.1	-0.0	130.1	4.2	0.4	-3.3	-0.1	-0.0
				Live load	93.5	-7.9	0.7	-6.5	0.5	0.0	93.5	8.3	-0.7	-6.5	0.5	0.0
				Wind +X ecc.+	-1.7	-2.5	0.0	-2.1	0.0	0.0	-1.7	2.7	-0.0	-2.1	0.0	0.0
				Wind +X ecc.-	-1.7	-2.3	0.6	-1.9	0.5	-0.0	-1.7	2.5	-0.7	-1.9	0.5	-0.0
				Wind -X ecc.+	1.7	2.5	-0.0	2.1	-0.0	-0.0	1.7	-2.7	0.0	2.1	-0.0	-0.0
				Wind -X ecc.-	1.7	2.3	-0.6	1.9	-0.5	0.0	1.7	-2.5	0.7	1.9	-0.5	0.0
				Wind +Y ecc.+	2.1	1.3	-2.2	1.1	-1.9	-0.0	2.1	-1.4	2.6	1.1	-1.9	-0.0
				Wind +Y ecc.-	2.3	0.4	-4.9	0.3	-4.3	0.0	2.3	-0.4	5.7	0.3	-4.3	0.0
				Wind -Y ecc.+	-2.1	-1.3	2.2	-1.1	1.9	0.0	-2.1	1.4	-2.6	-1.1	1.9	0.0
				Wind -Y ecc.-	-2.3	-0.4	4.9	-0.3	4.3	-0.0	-2.3	0.4	-5.7	-0.3	4.3	-0.0
				Earthquake X Mode 1	-4.9	-3.2	11.5	-2.7	9.7	-0.1	-4.9	3.4	-12.9	-2.7	9.7	-0.1
				Earthquake X Mode 2	27.8	37.7	2.0	31.4	1.6	-0.1	27.8	-40.7	-2.0	31.4	1.6	-0.1
				Earthquake X Mode 3	1.4	-0.7	-5.5	-0.6	-4.7	0.0	1.4	0.8	6.2	-0.6	-4.7	0.0
				Earthquake X Mode 4	0.7	0.4	-2.7	0.3	-2.0	0.0	0.7	-0.3	2.3	0.3	-2.0	0.0
				Earthquake X Mode 5	-6.6	-6.2	-1.1	-4.6	-0.8	0.0	-6.6	5.3	0.8	-4.6	-0.8	0.0
				Earthquake X Mode 6	-0.0	0.1	0.8	0.0	0.6	-0.0	-0.0	-0.1	-0.7	0.0	0.6	-0.0
				Earthquake X Mode 7	-0.0	-0.0	0.1	-0.0	-0.1	0.0	-0.0	0.0	0.2	-0.0	-0.1	0.0
				Earthquake X Mode 8	-0.2	0.0	-0.1	0.0	0.0	0.0	-0.2	-0.1	-0.1	0.0	0.0	0.0
				Earthquake X Mode 9	-1.2	0.1	0.1	0.2	0.1	-0.0	-1.2	-0.5	-0.1	0.2	0.1	-0.0
				Earthquake Y Mode 1	-2.2	-1.5	5.2	-1.2	4.4	-0.1	-2.2	1.6	-5.8	-1.2	4.4	-0.1
				Earthquake Y Mode 2	8.6	11.6	0.6	9.7	0.5	-0.0	8.6	-12.6	-0.6	9.7	0.5	-0.0
				Earthquake Y Mode 3	8.8	-4.3	-34.0	-3.7	-28.9	0.1	8.8	5.0	38.1	-3.7	-28.9	0.1
				Earthquake Y Mode 4	0.1	0.1	-0.5	0.1	-0.4	0.0	0.1					



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.50	Self weight	419.7	-13.2	1.4	-10.8	1.1	0.0	0.0	404.3	13.9	-1.3	-10.8	1.1	0.0
				Dead load	146.8	-3.4	0.5	-2.8	0.5	-0.0	146.8	3.7	-0.7	-2.8	0.5	-0.0
				Live load	157.3	-6.8	0.6	-5.6	0.5	0.0	157.3	7.2	-0.5	-5.6	0.5	0.0
				Wind +X ecc.+	-3.4	-3.3	0.0	-2.7	0.0	0.0	-3.4	3.4	-0.0	-2.7	0.0	0.0
				Wind +X ecc.-	-3.3	-3.0	0.9	-2.4	0.7	-0.0	-3.3	3.1	-0.9	-2.4	0.7	-0.0
				Wind -X ecc.+	3.4	3.3	-0.0	2.7	-0.0	-0.0	3.4	-3.4	0.0	2.7	-0.0	-0.0
				Wind -X ecc.-	3.3	3.0	-0.9	2.4	-0.7	0.0	3.3	-3.1	0.9	2.4	-0.7	0.0
				Wind +Y ecc.+	3.2	1.5	-3.2	1.2	-2.7	-0.0	3.2	-1.5	3.5	1.2	-2.7	-0.0
				Wind +Y ecc.-	2.9	0.1	-7.0	0.1	-5.9	0.0	2.9	-0.1	7.7	0.1	-5.9	0.0
				Wind -Y ecc.+	-3.2	-1.5	3.2	-1.2	2.7	0.0	-3.2	1.5	-3.5	-1.2	2.7	0.0
				Wind -Y ecc.-	-2.9	-0.1	7.0	-0.1	5.9	-0.0	-2.9	0.1	-7.7	-0.1	5.9	-0.0
				Earthquake X Mode 1	-7.6	-3.6	14.8	-3.0	12.2	-0.2	-7.6	3.7	-15.6	-3.0	12.2	-0.2
				Earthquake X Mode 2	51.9	45.8	2.4	37.0	1.9	-0.1	51.9	-46.8	-2.4	37.0	1.9	-0.1
				Earthquake X Mode 3	1.4	-1.2	-7.1	-1.0	-5.8	0.0	1.4	1.2	7.5	-1.0	-5.8	0.0
				Earthquake X Mode 4	0.8	0.1	-1.1	0.1	-0.6	0.0	0.8	-0.1	0.3	0.1	-0.6	0.0
				Earthquake X Mode 5	-8.1	-1.9	-0.4	-0.9	-0.1	0.0	-8.1	0.3	-0.0	-0.9	-0.1	0.0
				Earthquake X Mode 6	-0.0	0.0	0.3	-0.0	0.2	-0.0	-0.0	0.0	-0.1	-0.0	0.2	-0.0
				Earthquake X Mode 7	-0.1	-0.0	-1.0	-0.0	-0.8	0.0	-0.1	0.0	1.0	-0.0	-0.8	0.0
				Earthquake X Mode 8	0.0	0.3	0.7	0.2	0.5	0.0	0.0	-0.3	-0.7	0.2	0.5	0.0
				Earthquake X Mode 9	-0.4	1.8	0.1	1.4	0.0	-0.0	-0.4	-1.7	-0.1	1.4	0.0	-0.0
				Earthquake Y Mode 1	-3.5	-1.6	6.7	-1.3	5.5	-0.1	-3.5	1.7	-7.1	-1.3	5.5	-0.1
				Earthquake Y Mode 2	16.0	14.1	0.7	11.4	0.6	-0.0	16.0	-14.4	-0.8	11.4	0.6	-0.0
				Earthquake Y Mode 3	8.5	-7.3	-43.9	-5.9	-36.0	0.1	8.5	7.4	46.1	-5.9	-36.0	0.1
				Earthquake Y Mode 4	0.2	0.0	-0.2	0.0	-0.1	0.0	0.2	-0.0	0.1	0.0	-0.1	0.0
				Earthquake Y Mode 5	-1.5	-0.3	-0.1	-0.2	-0.0	0.0	-1.5	0.1	-0.0	-0.2	-0.0	0.0
				Earthquake Y Mode 6	-0.4	0.1	2.6	-0.0	1.4	-0.0	-0.4	0.2	-0.9	-0.0	1.4	-0.0
				Earthquake Y Mode 7	-0.0	-0.0	-0.3	-0.0	-0.2	0.0	-0.0	0.0	0.3	-0.0	-0.2	0.0
				Earthquake Y Mode 8	0.0	0.7	1.7	0.5	1.3	0.0	0.0	-0.7	-1.6	0.5	1.3	0.0
				Earthquake Y Mode 9	-0.1	0.7	0.0	0.5	0.0	-0.0	-0.1	-0.6	-0.0	0.5	0.0	-0.0
Floor 2	50x50	3.00/5.50	Self weight	557.1	-10.7	0.9	-8.9	0.7	0.0	0.0	541.8	11.4	-0.9	-8.9	0.7	0.0
				Dead load	162.2	-2.4	0.4	-2.0	0.3	0.0	162.2	2.7	-0.4	-2.0	0.3	0.0
				Live load	220.5	-5.7	0.4	-4.7	0.3	0.0	220.5	6.1	-0.3	-4.7	0.3	0.0
				Wind +X ecc.+	-5.6	-3.9	0.0	-3.0	0.0	0.0	-5.6	3.7	-0.0	-3.0	0.0	0.0
				Wind +X ecc.-	-5.3	-3.5	1.1	-2.7	0.9	-0.0	-5.3	3.4	-1.1	-2.7	0.9	-0.0
				Wind -X ecc.+	5.6	3.9	-0.0	3.0	-0.0	-0.0	5.6	-3.7	0.0	3.0	-0.0	-0.0
				Wind -X ecc.-	5.3	3.5	-1.1	2.7	-0.9	0.0	5.3	-3.4	1.1	2.7	-0.9	0.0
				Wind +Y ecc.+	4.2	1.5	-4.3	1.1	-3.4	-0.0	4.2	-1.4	4.3	1.1	-3.4	-0.0
				Wind +Y ecc.-	3.1	-0.3	-9.2	-0.2	-7.4	0.0	3.1	0.3	9.2	-0.2	-7.4	0.0
				Wind -Y ecc.+	-4.2	-1.5	4.3	-1.1	3.4	0.0	-4.2	1.4	-4.3	-1.1	3.4	0.0
				Wind -Y ecc.-	-3.1	0.3	9.2	0.2	7.4	-0.0	-3.1	-0.3	-9.2	0.2	7.4	-0.0
				Earthquake X Mode 1	-10.0	-3.5	17.2	-2.8	13.4	-0.2	-10.0	3.4	-16.3	-2.8	13.4	-0.2
				Earthquake X Mode 2	79.9	49.2	2.7	38.0	2.0	-0.1	79.9	-45.8	-2.3	38.0	2.0	-0.1
				Earthquake X Mode 3	0.8	-1.6	-8.3	-1.2	-6.5	0.0	0.8	1.5	8.0	-1.2	-6.5	0.0
				Earthquake X Mode 4	0.9	-0.1	1.3	-0.1	1.2	-0.0	0.9	0.1	-1.7	-0.1	1.2	-0.0
				Earthquake X Mode 5	-6.5	3.5	0.6	3.1	0.6	-0.0	-6.5	-4.3	-0.8	3.1	0.6	-0.0
				Earthquake X Mode 6	-0.1	-0.1	-0.4	-0.1	-0.3	0.0	-0.1	0.1	0.5	-0.1	-0.3	0.0
				Earthquake X Mode 7	-0.1	-0.0	-0.3	-0.0	-0.1	0.0	-0.1	0.0	0.0	-0.0	-0.1	0.0
				Earthquake X Mode 8	0.1	0.1	0.2	0.0	0.1	-0.0	0.1	0.0	-0.0	0.0	0.1	-0.0
				Earthquake X Mode 9	0.2	0.3	-0.0	0.1	-0.0	-0.0	0.2	0.1	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-4.5	-1.6	7.8	-1.3	6.1	-0.1	-4.5	1.5	-7.4	-1.3	6.1	-0.1
				Earthquake Y Mode 2	24.7	15.2	0.8	11.7	0.6	-0.0	24.7	-14.1	-0.7	11.7	0.6	-0.0
				Earthquake Y Mode 3	4.7	-10.1	-51.3	-7.6	-40.1	0.1	4.7	8.9	49.0	-7.6	-40.1	0.1
				Earthquake Y Mode 4	0.2	-0.0	0.2	-0.0	0.2	-0.0	0.2	0.0	-0.3	-0.0	0.2	-0.0
				Earthquake Y Mode 5	-1.2	0.6	0.1	0.6	0.1	-0.0	-1.2	-0.8	-0.2	0.6	0.1	-0.0
				Earthquake Y Mode 6	-1.0	-0.6	-3.0	-0.6	-2.8	0.0	-1.0	0.8	4.1	-0.6	-2.8	0.0
				Earthquake Y Mode 7	-0.0	-0.0	-0.1	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake Y Mode 8	0.3	0.2	0.6	0.1	0.2	-0.0	0.3	0.0	-0.1	0.1	0.2	-0.0
				Earthquake Y Mode 9	0.1	0.1	-0.0	0.0	-0.0	-0.0	0.1	0.0	0.0	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.50	Self weight	694.6	-4.3	-0.3	-4.5	0.2	0.0	0.0	679.3	7.0	-0.7	-4.5	0.2	0.0
				Dead load	176.2	-0.9	0.1	-0.9	0.2	0.0	176.2	1.5	-0.4	-0.9	0.2	0.0
				Live load	283.4	-2.3	-0.2	-2.4	0.1	0.0	283.4	3.8	-0.4	-2.4	0.1	0.0
				Wind +X ecc.+	-7.7	-3.4	-0.0	-2.3	0.0	0.0	-7.7	2.4	-0.0	-2.3	0.0	0.0
				Wind +X ecc.-	-7.2	-3.0	1.2	-2.1	0.8	-0.0	-7.2	2.1	-0.8	-2.1	0.8	-0.0
				Wind -X ecc.+	7.7	3.4	0.0	2.3	-0.0	-0.0	7.7	-2.4	0.0	2.3	-0.0	-0.0
				Wind -X ecc.-	7.2	3.0	-1.2	2.1	-0.8	0.0	7.2	-2.1	0.8	2.1	-0.8	0.0
				Wind +Y ecc.+	4.8	0.9	-4.9	0.7	-3.3	-0.0	4.8	-0.7	3.4	0.7	-3.3	-0.0
				Wind +Y ecc.-	2.4	-0.9	-10.4	-0.5	-7.0	0.0	2.4	0.5	7.1	-0.5	-7.0	0.0
				Wind -Y ecc.+	-4.8	-0.9	4.9	-0.7	3.3	0.0	-4.8	0.7	-3.4	-0.7	3.3	0.0
				Wind -Y ecc.-	-2.4	0.9	10.4	0.5	7.0	-0.0	-2.4	-0.5	-7.1	0.5	7.0	-0.0
				Earthquake X Mode 1	-11.3	-2.2	16.1	-1.5	10.8	-0.1	-11.3	1.7	-10.8	-1.5	10.8	-0.1
				Earthquake X Mode 2	104.7	38.2	2.6	25.7	1.6	-0.1	104.7	-26.1	-1.3	25.7	1.6	-0.1
				Earthquake X Mode 3	-0.4	-1.7	-8.1	-1.1	-5.4	0.0	-0.4	1.1	5.4	-1.1	-5.4	0.0
				Earthquake X Mode 4	1.0	-0.1	2.6	-0.1	1.8	-0.0	1.0	0.1	-1.9	-0.1	1.8	-0.0
				Earthquake X Mode 5	-3.2	5.4	1.1	3.8	0.8	-0.0	-3.2	-4.1	-0.8	3.8	0.8	-0.0
				Earthquake X Mode 6	-0.2	-0.1	-0.8	-0.1	-0.5	0.0	-0.2	0.1	0.6	-0.1	-0.5	0.0
				Earthquake X Mode 7	-0.1	0.0	0.9	0.0	0.7	-0.0	-0.1	-0.0	-0.8	0.0	0.7	-0.0
				Earthquake X Mode 8	0.0	-0.2	-0.6	-0.2	-0.5	0.0	0.0	0.2	0.5	-0.2	-0.5	0.0
				Earthquake X Mode 9	-0.4	-1.6	-0.1	-1.2	-0.0	0.0	-0.4	1.4	0.0	-1.2	-0.0	0.0
				Earthquake Y Mode 1	-5.1	-1.0	7.3	-0.7	4.9	-0.0	-5.1	0.8	-4.9	-0.7	4.9	-0.0
				Earthquake Y Mode 2	32.3	11.8	0.8	7.9	0.5	-0.0	32.3	-8.1	-0.4	7.9	0.5	-0.0



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C20	techo	50x50	12.00/14.50	Self weight	117.9	9.2	17.6	6.1	11.4	0.0	102.6	-6.0	-10.9	6.1	11.4	0.0
				Dead load	98.5	1.6	8.6	1.7	6.6	-0.0	98.5	-2.8	-7.8	1.7	6.6	-0.0
				Live load	19.2	4.5	8.4	2.9	5.0	0.0	19.2	-2.7	-4.1	2.9	5.0	0.0
				Wind +X ecc.+	1.1	-1.0	-0.2	-0.7	-0.1	0.0	1.1	0.8	0.1	-0.7	-0.1	0.0
				Wind +X ecc.-	0.9	-0.9	-0.1	-0.6	-0.1	-0.0	0.9	0.7	0.1	-0.6	-0.1	-0.0
				Wind -X ecc.+	-1.1	1.0	0.2	0.7	0.1	-0.0	-1.1	-0.8	-0.1	0.7	0.1	-0.0
				Wind -X ecc.-	-0.9	0.9	0.1	0.6	0.1	0.0	-0.9	-0.7	-0.1	0.6	0.1	0.0
				Wind +Y ecc.+	1.0	0.2	-2.3	0.1	-1.5	-0.0	1.0	-0.1	1.4	0.1	-1.5	-0.0
				Wind +Y ecc.-	1.7	-0.6	-2.7	-0.4	-1.7	0.0	1.7	0.4	1.6	-0.4	-1.7	0.0
				Wind -Y ecc.+	-1.0	-0.2	2.3	-0.1	1.5	0.0	-1.0	0.1	-1.4	-0.1	1.5	0.0
				Wind -Y ecc.-	-1.7	0.6	2.7	0.4	1.7	-0.0	-1.7	-0.4	-1.6	0.4	1.7	-0.0
				Earthquake X Mode 1	1.1	-0.0	-0.4	-0.1	-0.2	-0.1	1.1	0.1	0.2	-0.1	-0.2	-0.1
				Earthquake X Mode 2	-14.0	17.5	-0.6	12.0	-0.4	-0.1	-14.0	-12.6	0.4	12.0	-0.4	-0.1
				Earthquake X Mode 3	2.9	-1.2	-3.4	-0.8	-2.1	0.0	2.9	0.8	2.0	-0.8	-2.1	0.0
				Earthquake X Mode 4	0.8	0.0	-0.8	0.0	-0.5	0.0	0.8	-0.0	0.4	0.0	-0.5	0.0
				Earthquake X Mode 5	2.7	-4.7	-0.1	-3.0	-0.1	0.0	2.7	2.9	0.0	-3.0	-0.1	0.0
				Earthquake X Mode 6	-0.9	0.1	0.8	0.1	0.5	-0.0	-0.9	-0.1	-0.4	0.1	0.5	-0.0
				Earthquake X Mode 7	-0.6	0.0	0.5	0.0	0.3	-0.0	-0.6	-0.0	-0.3	0.0	0.3	-0.0
				Earthquake X Mode 8	1.0	-0.2	-0.8	-0.1	-0.5	-0.0	1.0	0.1	0.4	-0.1	-0.5	-0.0
				Earthquake X Mode 9	0.2	-1.5	0.3	-0.9	0.2	0.0	0.2	0.7	-0.2	-0.9	0.2	0.0
				Earthquake Y Mode 1	0.5	-0.0	-0.2	-0.0	-0.1	-0.0	0.5	0.1	0.1	-0.0	-0.1	-0.0
				Earthquake Y Mode 2	-4.3	5.4	-0.2	3.7	-0.1	-0.0	-4.3	-3.9	0.1	3.7	-0.1	-0.0
				Earthquake Y Mode 3	17.7	-7.1	-20.8	-4.8	-13.2	0.0	17.7	4.9	12.2	-4.8	-13.2	0.0
				Earthquake Y Mode 4	0.1	0.0	-0.2	0.0	-0.1	0.0	0.1	-0.0	0.1	0.0	-0.1	0.0
				Earthquake Y Mode 5	0.5	-0.9	-0.0	-0.6	-0.0	0.0	0.5	0.5	0.0	-0.6	-0.0	0.0
				Earthquake Y Mode 6	-7.1	1.0	6.3	0.7	3.9	-0.0	-7.1	-0.6	-3.4	0.7	3.9	-0.0
				Earthquake Y Mode 7	-0.2	0.0	0.2	0.0	0.1	-0.0	-0.2	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake Y Mode 8	2.4	-0.6	-1.9	-0.3	-1.1	-0.0	2.4	0.3	0.9	-0.3	-1.1	-0.0
				Earthquake Y Mode 9	0.1	-0.6	0.1	-0.3	0.1	0.0	0.1	0.3	-0.1	-0.3	0.1	0.0
	Floor 4	50x50	9.00/11.50	Self weight	213.2	9.0	19.5	7.3	15.9	0.0	197.9	-9.4	-20.2	7.3	15.9	0.0
				Dead load	121.8	-1.8	4.6	-1.5	3.6	-0.0	121.8	2.0	-4.5	-1.5	3.6	-0.0
				Live load	65.9	4.6	10.3	3.8	8.4	0.0	65.9	-4.8	-10.8	3.8	8.4	0.0
				Wind +X ecc.+	2.5	-1.8	-0.2	-1.6	-0.2	0.0	2.5	2.1	0.3	-1.6	-0.2	0.0
				Wind +X ecc.-	2.1	-1.5	-0.0	-1.4	-0.0	-0.0	2.1	1.8	0.0	-1.4	-0.0	-0.0
				Wind -X ecc.+	-2.5	1.8	0.2	1.6	0.2	-0.0	-2.5	-2.1	-0.3	1.6	0.2	-0.0
				Wind -X ecc.-	-2.1	1.5	0.0	1.4	0.0	0.0	-2.1	-1.8	-0.0	1.4	0.0	0.0
				Wind +Y ecc.+	5.7	0.4	-4.9	0.3	-4.1	-0.0	5.7	-0.5	5.3	0.3	-4.1	-0.0
				Wind +Y ecc.-	7.8	-0.7	-5.8	-0.6	-4.8	0.0	7.8	0.8	6.2	-0.6	-4.8	0.0
				Wind -Y ecc.+	-5.7	-0.4	4.9	-0.3	4.1	0.0	-5.7	0.5	-5.3	-0.3	4.1	0.0
				Wind -Y ecc.-	-7.8	0.7	5.8	0.6	4.8	-0.0	-7.8	-0.8	-6.2	0.6	4.8	-0.0
				Earthquake X Mode 1	2.3	-0.7	0.1	-0.7	0.1	-0.1	2.3	0.9	-0.2	-0.7	0.1	-0.1
				Earthquake X Mode 2	-27.8	27.8	-3.6	23.7	-2.9	-0.1	-27.8	-31.5	3.7	23.7	-2.9	-0.1
				Earthquake X Mode 3	10.6	-1.6	-6.4	-1.3	-5.3	0.0	10.6	1.8	6.8	-1.3	-5.3	0.0
				Earthquake X Mode 4	2.1	0.1	-1.0	0.0	-0.8	0.0	2.1	-0.0	0.9	0.0	-0.8	0.0
				Earthquake X Mode 5	5.4	-5.1	-0.0	-3.6	-0.0	0.0	5.4	4.0	0.1	-3.6	-0.0	0.0
				Earthquake X Mode 6	-2.2	0.1	0.9	0.1	0.7	-0.0	-2.2	-0.1	-0.9	0.1	0.7	-0.0
				Earthquake X Mode 7	-1.0	0.0	0.0	0.0	-0.0	0.0	-1.0	-0.0	0.1	0.0	-0.0	0.0
				Earthquake X Mode 8	1.5	-0.0	-0.0	0.0	0.0	0.0	1.5	-0.1	-0.1	0.0	0.0	0.0
				Earthquake X Mode 9	0.2	-0.1	-0.0	0.2	-0.0	-0.0	0.2	-0.6	0.1	0.2	-0.0	-0.0
				Earthquake Y Mode 1	1.1	-0.3	0.1	-0.3	0.1	-0.1	1.1	0.4	-0.1	-0.3	0.1	-0.1
				Earthquake Y Mode 2	-8.6	8.6	-1.1	7.3	-0.9	-0.0	-8.6	-9.7	1.1	7.3	-0.9	-0.0
				Earthquake Y Mode 3	65.3	-9.8	-39.6	-8.3	-32.6	0.1	65.3	10.9	42.0	-8.3	-32.6	0.1
				Earthquake Y Mode 4	0.4	0.0	-0.2	0.0	-0.1	0.0	0.4	-0.0	0.2	0.0	-0.1	0.0
				Earthquake Y Mode 5	1.0	-0.9	-0.0	-0.7	-0.0	0.0	1.0	0.7	0.0	-0.7	-0.0	0.0
				Earthquake Y Mode 6	-18.4	1.1	7.5	0.8	5.8	-0.0	-18.4	-1.0	-7.1	0.8	5.8	-0.0
				Earthquake Y Mode 7	-0.3	0.0	0.0	0.0	-0.0	0.0	-0.3	-0.0	0.0	0.0	-0.0	0.0
				Earthquake Y Mode 8	3.7	-0.1	-0.0	0.0	0.1	0.0	3.7	-0.2	-0.3	0.0	0.1	0.0
				Earthquake Y Mode 9	0.1	-0.0	-0.0	0.1	-0.0	-0.0	0.1	-0.2	0.0	0.1	-0.0	-0.0
Floor 3	50x50	6.00/8.50	Self weight	311.5	7.3	16.7	6.1	13.6	0.0	296.2	-7.9	-17.4	6.1	13.6	0.0	
				Dead load	150.0	-2.1	4.1	-1.6	3.5	-0.0	150.0	1.8	-4.6	-1.6	3.5	-0.0
				Live load	112.9	3.8	9.0	3.2	7.3	0.0	112.9	-4.1	-9.2	3.2	7.3	0.0
				Wind +X ecc.+	4.2	-2.4	-0.2	-2.0	-0.2	0.0	4.2	2.6	0.2	-2.0	-0.2	0.0
				Wind +X ecc.-	3.2	-2.1	0.1	-1.8	0.1	-0.0	3.2	2.3	-0.1	-1.8	0.1	-0.0
				Wind -X ecc.+	-4.2	2.4	0.2	2.0	0.2	-0.0	-4.2	-2.6	-0.2	2.0	0.2	-0.0
				Wind -X ecc.-	-3.2	2.1	-0.1	1.8	-0.1	0.0	-3.2	-2.3	0.1	1.8	-0.1	0.0
				Wind +Y ecc.+	14.3	0.6	-6.9	0.5	-5.6	-0.0	14.3	-0.6	7.1	0.5	-5.6	-0.0
				Wind +Y ecc.-	18.8	-0.8	-8.3	-0.7	-6.7	0.0	18.8	0.9	8.5	-0.7	-6.7	0.0
				Wind -Y ecc.+	-14.3	-0.6	6.9	-0.5	5.6	0.0	-14.3	0.6	-7.1	-0.5	5.6	0.0
				Wind -Y ecc.-	-18.8	0.8	8.3	0.7	6.7	-0.0	-18.8	-0.9	-8.5	0.7	6.7	-0.0
				Earthquake X Mode 1	2.2	-1.3	1.1	-1.0	0.9	-0.2	2.2	1.3	-1.2	-1.0	0.9	-0.2
				Earthquake X Mode 2	-39.4	34.5	-5.9	28.1	-4.7	-0.1	-39.4	-35.7	5.8	28.1	-4.7	-0.1
				Earthquake X Mode 3	22.5	-1.8	-8.3	-1.5	-6.7	0.0	22.5	1.9	8.4	-1.5	-6.7	0.0
				Earthquake X Mode 4	2.8	0.0	-0.4	-0.0	-0.2	0.0	2.8	0.1	0.2	-0.0	-0.2	0.0
				Earthquake X Mode 5	6.8	-1.8	-0.1	-0.7	-0.1	0.0	6.8	-0.1	0.2	-0.7	-0.1	0.0
				Earthquake X Mode 6	-3.0	0.1	0.3	0.0	0.2	-0.0	-3.0	-0.0	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 7	-0.3	-0.0	-0.6	-0.0	-0.5	0.0	-0.3	0.0	0.6	-0.0	-0.5	0.0
				Earthquake X Mode 8	0.5	0.2	0.9	0.2	0.7	0.0	0.5	-0.2	-0.8	0.2	0.7	0.0
				Earthquake X Mode 9	0.3	1.5	-0.4	1.2	-0.3	-0.0	0.3	-1.4	0.4	1.2	-0.3	-0.0
				Earthquake Y Mode 1	1.0	-0.6	0.5	-0.5	0.4	-0.1	1.0	0.6	-0.6	-0.5	0.4	-0.1
				Earthquake Y Mode 2	-12.2	10.6	-1.8	8.7	-1.4	-0.0	-12.2	-11.0	1.8	8.7	-1.4	-0.0
				Earthquake Y Mode 3	138.6	-11.2	-51.0	-9.2	-41.1	0.1	138.6	11.8	51.8	-9.2	-41.1	0.1
				Earthquake Y Mode 4	0.5	0.0	-0.1									



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	50x50	3.00/5.50	Self weight	414.9	5.3	14.1	4.5	11.5	0.0	399.5	-6.0	-14.5	4.5	11.5	0.0
				Dead load	181.0	-3.3	2.8	-2.5	2.4	0.0	181.0	2.9	-3.2	-2.5	2.4	0.0
				Live load	162.2	2.8	7.9	2.4	6.4	0.0	162.2	-3.2	-8.0	2.4	6.4	0.0
				Wind +X ecc.+	5.9	-3.0	-0.1	-2.3	-0.1	0.0	5.9	2.8	0.1	-2.3	-0.1	0.0
				Wind +X ecc.-	4.1	-2.6	0.3	-2.0	0.3	-0.0	4.1	2.5	-0.3	-2.0	0.3	-0.0
				Wind -X ecc.+	-5.9	3.0	0.1	2.3	0.1	-0.0	-5.9	-2.8	-0.1	2.3	0.1	-0.0
				Wind -X ecc.-	-4.1	2.6	-0.3	2.0	-0.3	0.0	-4.1	-2.5	0.3	2.0	-0.3	0.0
				Wind +Y ecc.+	26.2	0.8	-8.7	0.6	-6.8	-0.0	26.2	-0.6	8.4	0.6	-6.8	-0.0
				Wind +Y ecc.-	34.2	-0.9	-10.7	-0.8	-8.4	0.0	34.2	1.0	10.4	-0.8	-8.4	0.0
				Wind -Y ecc.+	-26.2	-0.8	8.7	-0.6	6.8	0.0	-26.2	0.6	-8.4	-0.6	6.8	0.0
				Wind -Y ecc.-	-34.2	0.9	10.7	0.8	8.4	-0.0	-34.2	-1.0	-10.4	0.8	8.4	-0.0
				Earthquake X Mode 1	0.1	-1.7	2.5	-1.2	2.0	-0.2	0.1	1.3	-2.5	-1.2	2.0	-0.2
				Earthquake X Mode 2	-48.3	38.2	-7.6	29.1	-5.7	-0.1	-48.3	-34.4	6.7	29.1	-5.7	-0.1
				Earthquake X Mode 3	37.2	-1.9	-9.5	-1.5	-7.5	0.0	37.2	1.8	9.1	-1.5	-7.5	0.0
				Earthquake X Mode 4	2.3	-0.1	0.6	-0.1	0.5	-0.0	2.3	0.1	-0.7	-0.1	0.5	-0.0
				Earthquake X Mode 5	6.7	2.6	-0.3	2.5	-0.2	-0.0	6.7	-3.6	0.3	2.5	-0.2	-0.0
				Earthquake X Mode 6	-2.5	-0.0	-0.5	-0.0	-0.5	0.0	-2.5	0.1	0.6	-0.0	-0.5	0.0
				Earthquake X Mode 7	0.2	-0.0	-0.2	-0.0	-0.1	0.0	0.2	0.0	0.1	-0.0	-0.1	0.0
				Earthquake X Mode 8	-0.3	0.1	0.2	0.0	0.1	-0.0	-0.3	0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 9	0.4	0.4	-0.1	0.1	-0.0	-0.0	0.4	0.2	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	0.0	-0.8	1.1	-0.6	0.9	-0.1	0.0	0.6	-1.1	-0.6	0.9	-0.1
				Earthquake Y Mode 2	-14.9	11.8	-2.4	9.0	-1.8	-0.0	-14.9	-10.6	2.1	9.0	-1.8	-0.0
				Earthquake Y Mode 3	229.0	-11.7	-58.7	-9.2	-45.9	0.1	229.0	11.3	56.1	-9.2	-45.9	0.1
				Earthquake Y Mode 4	0.4	-0.0	0.1	-0.0	0.1	-0.0	0.4	0.0	-0.1	-0.0	0.1	-0.0
				Earthquake Y Mode 5	1.2	0.5	-0.1	0.5	-0.0	-0.0	1.2	-0.7	0.1	0.5	-0.0	-0.0
				Earthquake Y Mode 6	-20.2	-0.3	-4.4	-0.3	-3.8	0.0	-20.2	0.5	5.0	-0.3	-3.8	0.0
				Earthquake Y Mode 7	0.1	-0.0	-0.0	-0.0	-0.0	0.0	0.1	0.0	0.0	-0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.7	0.2	0.5	0.1	0.3	-0.0	-0.7	0.0	-0.2	0.1	0.3	-0.0
				Earthquake Y Mode 9	0.1	0.1	-0.0	0.0	-0.0	-0.0	0.1	0.1	0.0	0.0	-0.0	-0.0
	Floor 1	50x50	0.00/2.50	Self weight	526.5	1.7	5.2	2.0	6.0	0.0	511.2	-3.4	-9.8	2.0	6.0	0.0
				Dead load	216.0	-1.7	0.9	-1.9	1.1	0.0	216.0	2.9	-1.8	-1.9	1.1	0.0
				Live load	215.7	0.9	2.9	1.1	3.4	0.0	215.7	-1.8	-5.6	1.1	3.4	0.0
				Wind +X ecc.+	7.2	-3.0	-0.0	-1.9	-0.0	0.0	7.2	1.7	0.0	-1.9	-0.0	0.0
				Wind +X ecc.-	4.6	-2.6	0.4	-1.7	0.3	-0.0	4.6	1.5	-0.4	-1.7	0.3	-0.0
				Wind -X ecc.+	-7.2	3.0	0.0	1.9	0.0	-0.0	-7.2	-1.7	-0.0	1.9	0.0	-0.0
				Wind -X ecc.-	-4.6	2.6	-0.4	1.7	-0.3	0.0	-4.6	-1.5	0.4	1.7	-0.3	0.0
				Wind +Y ecc.+	38.3	0.7	-7.6	0.4	-5.5	-0.0	38.3	-0.3	6.2	0.4	-5.5	-0.0
				Wind +Y ecc.-	50.5	-1.0	-9.8	-0.7	-7.2	0.0	50.5	0.8	8.1	-0.7	-7.2	0.0
				Wind -Y ecc.+	-38.3	-0.7	7.6	-0.4	5.5	0.0	-38.3	0.3	-6.2	-0.4	5.5	0.0
				Wind -Y ecc.-	-50.5	1.0	9.8	0.7	7.2	-0.0	-50.5	-0.8	-8.1	0.7	7.2	-0.0
				Earthquake X Mode 1	-4.3	-1.5	3.6	-0.8	2.6	-0.1	-4.3	0.6	-3.0	-0.8	2.6	-0.1
				Earthquake X Mode 2	-53.1	33.8	-5.9	20.9	-4.1	-0.1	-53.1	-18.5	4.4	20.9	-4.1	-0.1
				Earthquake X Mode 3	50.9	-1.7	-7.8	-1.1	-5.6	0.0	50.9	1.1	6.3	-1.1	-5.6	0.0
				Earthquake X Mode 4	0.9	-0.1	1.0	-0.1	0.8	-0.0	0.9	0.1	-0.9	-0.1	0.8	-0.0
				Earthquake X Mode 5	5.5	4.8	-0.2	3.2	-0.1	-0.0	5.5	-3.2	0.2	3.2	-0.1	-0.0
				Earthquake X Mode 6	-1.2	-0.1	-0.8	-0.1	-0.6	0.0	-1.2	0.1	0.7	-0.1	-0.6	0.0
				Earthquake X Mode 7	-0.2	0.0	0.5	0.0	0.4	-0.0	-0.2	-0.0	-0.4	0.0	0.4	-0.0
				Earthquake X Mode 8	0.3	-0.2	-0.7	-0.2	-0.5	0.0	0.3	0.2	0.6	-0.2	-0.5	0.0
				Earthquake X Mode 9	0.4	-1.4	0.3	-1.0	0.3	0.0	0.4	1.2	-0.3	-1.0	0.3	0.0
				Earthquake Y Mode 1	-1.9	-0.7	1.6	-0.4	1.2	-0.0	-1.9	0.3	-1.4	-0.4	1.2	-0.0
				Earthquake Y Mode 2	-16.4	10.4	-1.8	6.5	-1.3	-0.0	-16.4	-5.7	1.4	6.5	-1.3	-0.0
				Earthquake Y Mode 3	313.5	-10.6	-47.9	-7.0	-34.7	0.1	313.5	6.8	38.8	-7.0	-34.7	0.1
				Earthquake Y Mode 4	0.2	-0.0	0.2	-0.0	0.1	-0.0	0.2	0.0	-0.2	-0.0	0.1	-0.0
				Earthquake Y Mode 5	1.0	0.9	-0.0	0.6	-0.0	-0.0	1.0	-0.6	0.0	0.6	-0.0	-0.0
				Earthquake Y Mode 6	-9.8	-0.9	-6.6	-0.6	-5.0	0.0	-9.8	0.6	5.8	-0.6	-5.0	0.0
				Earthquake Y Mode 7	-0.1	0.0	0.1	0.0	0.1	-0.0	-0.1	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake Y Mode 8	0.9	-0.6	-1.7	-0.4	-1.3	0.0	0.9	0.5	1.6	-0.4	-1.3	0.0
				Earthquake Y Mode 9	0.1	-0.5	0.1	-0.4	0.1	0.0	0.1	0.4	-0.1	-0.4	0.1	0.0
C21	techo	30x30	12.00/14.50	Self weight	105.3	0.1	1.1	0.0	0.8	0.0	99.8	-0.0	-0.8	0.0	0.8	0.0
				Dead load	118.9	0.2	0.8	0.1	0.5	-0.0	118.9	-0.1	-0.5	0.1	0.5	-0.0
				Live load	15.5	0.1	0.7	0.0	0.5	0.0	15.5	-0.0	-0.4	0.0	0.5	0.0
				Wind +X ecc.+	-0.0	-0.4	0.0	-0.2	0.0	0.0	-0.0	0.2	0.0	-0.2	0.0	0.0
				Wind +X ecc.-	-0.0	-0.4	0.0	-0.2	0.0	-0.0	-0.0	0.2	-0.0	-0.2	0.0	-0.0
				Wind -X ecc.+	0.0	0.4	-0.0	0.2	-0.0	-0.0	0.0	-0.2	0.0	0.2	-0.0	-0.0
				Wind -X ecc.-	0.0	0.4	-0.0	0.2	-0.0	0.0	0.0	-0.2	0.0	0.2	-0.0	0.0
				Wind +Y ecc.+	0.2	0.1	-0.3	0.1	-0.2	-0.0	0.2	-0.0	0.2	0.1	-0.2	-0.0
				Wind +Y ecc.-	0.2	-0.1	-0.3	-0.1	-0.2	0.0	0.2	0.0	0.2	-0.1	-0.2	0.0
				Wind -Y ecc.+	-0.2	-0.1	0.3	-0.1	0.2	0.0	-0.2	0.0	-0.2	-0.1	0.2	0.0
				Wind -Y ecc.-	-0.2	0.1	0.3	0.1	0.2	-0.0	-0.2	-0.0	-0.2	0.1	0.2	-0.0
				Earthquake X Mode 1	0.1	-0.4	-0.4	-0.2	-0.2	-0.0	0.1	0.2	0.2	-0.2	-0.2	-0.0
				Earthquake X Mode 2	0.6	6.2	-0.8	3.6	-0.5	-0.0	0.6	-2.9	0.5	3.6	-0.5	-0.0
				Earthquake X Mode 3	0.2	-0.3	-0.4	-0.2	-0.2	0.0	0.2	0.1	0.2	-0.2	-0.2	0.0
				Earthquake X Mode 4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0
				Earthquake X Mode 5	-0.0	-1.3	0.1	-0.8	0.1	0.0	-0.0	0.6	-0.1	-0.8	0.1	0.0
				Earthquake X Mode 6	-0.0	0.0	0.1	0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake X Mode 7	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake X Mode 8	-0.0	-0.0	-0.1	-0.0	-0.1	-0.0	-0.0	0.0	0.0	-0.0	-0.1	-0.0
				Earthquake X Mode 9	0.0	-0.3	0.1	-0.2	0.0	0.0	0.0	0.1	-0.0	-0.2	0.0	0.0
				Earthquake Y Mode 1	0.0	-0.2	-0.2	-0.1	-0.1	-0.0	0.0	0.1	0.1	-0.1	-0.1	-0.0
				Earthquake Y Mode 2	0.2	1.9	-0.3	1.1	-0.2	-0.0	0.2	-0.9	0.2	1.1	-0.2	-0.0



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 4	30x30	9.00/11.50	Self weight	205.9	0.1	1.2	0.1	1.0	0.0	0.0	200.4	-0.1	-1.3	0.1	1.0	0.0
				Dead load	124.4	0.2	0.9	0.2	0.8	-0.0	124.4	-0.2	-1.0	0.2	0.8	-0.0
				Live load	75.0	0.0	0.8	0.0	0.7	0.0	75.0	-0.1	-0.9	0.0	0.7	0.0
				Wind +X ecc.+	-0.0	-0.8	0.0	-0.6	0.0	0.0	-0.0	0.8	-0.0	-0.6	0.0	0.0
				Wind +X ecc.-	-0.0	-0.7	-0.0	-0.6	-0.0	-0.0	-0.0	0.7	0.0	-0.6	-0.0	-0.0
				Wind -X ecc.+	0.0	0.8	-0.0	0.6	-0.0	-0.0	0.0	-0.8	0.0	0.6	-0.0	-0.0
				Wind -X ecc.-	0.0	0.7	0.0	0.6	0.0	0.0	0.0	-0.7	-0.0	0.6	0.0	0.0
				Wind +Y ecc.+	0.4	0.2	-0.7	0.2	-0.6	-0.0	0.4	-0.2	0.8	0.2	-0.6	-0.0
				Wind +Y ecc.-	0.5	-0.2	-0.6	-0.1	-0.5	0.0	0.5	0.2	0.7	-0.1	-0.5	0.0
				Wind -Y ecc.+	-0.4	-0.2	0.7	-0.2	0.6	0.0	-0.4	0.2	-0.8	-0.2	0.6	0.0
				Wind -Y ecc.-	-0.5	0.2	0.6	0.1	0.5	-0.0	-0.5	-0.2	-0.7	0.1	0.5	-0.0
				Earthquake X Mode 1	0.0	-0.7	-0.7	-0.6	-0.6	-0.0	0.0	0.7	0.7	-0.6	-0.6	-0.0
				Earthquake X Mode 2	1.1	11.7	-1.4	9.4	-1.2	-0.0	1.1	-11.8	1.5	9.4	-1.2	-0.0
				Earthquake X Mode 3	0.4	-0.5	-0.7	-0.4	-0.6	0.0	0.4	0.5	0.7	-0.4	-0.6	0.0
				Earthquake X Mode 4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.0	0.0	0.0	0.0
				Earthquake X Mode 5	-0.1	-1.6	0.1	-1.3	0.1	0.0	-0.1	1.6	-0.1	-1.3	0.1	0.0
				Earthquake X Mode 6	-0.0	0.0	0.1	0.0	0.1	-0.0	-0.0	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake X Mode 7	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0
				Earthquake X Mode 8	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0
				Earthquake X Mode 9	0.0	0.1	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0
				Earthquake Y Mode 1	0.0	-0.3	-0.3	-0.3	-0.3	-0.0	0.0	0.3	0.3	-0.3	-0.3	-0.0
				Earthquake Y Mode 2	0.3	3.6	-0.4	2.9	-0.4	-0.0	0.3	-3.7	0.5	2.9	-0.4	-0.0
				Earthquake Y Mode 3	2.7	-3.3	-4.1	-2.7	-3.4	0.0	2.7	3.4	4.5	-2.7	-3.4	0.0
				Earthquake Y Mode 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0
				Earthquake Y Mode 5	-0.0	-0.3	0.0	-0.2	0.0	0.0	-0.0	0.3	-0.0	-0.2	0.0	0.0
				Earthquake Y Mode 6	-0.2	0.3	0.8	0.2	0.6	-0.0	-0.2	-0.3	-0.7	0.2	0.6	-0.0
				Earthquake Y Mode 7	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0
				Earthquake Y Mode 8	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0
				Earthquake Y Mode 9	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0
Floor 3	30x30	6.00/8.50	Self weight	311.2	0.0	1.0	0.0	0.8	0.0	0.0	305.7	-0.1	-1.0	0.0	0.8	0.0
				Dead load	133.6	0.1	0.8	0.1	0.7	-0.0	133.6	-0.2	-0.9	0.1	0.7	-0.0
				Live load	136.3	0.0	0.7	0.0	0.6	0.0	136.3	-0.0	-0.7	0.0	0.6	0.0
				Wind +X ecc.+	-0.0	-1.0	0.0	-0.8	0.0	0.0	-0.0	1.0	-0.0	-0.8	0.0	0.0
				Wind +X ecc.-	-0.1	-0.9	-0.0	-0.7	-0.0	-0.0	-0.1	0.9	0.0	-0.7	-0.0	-0.0
				Wind -X ecc.+	0.0	1.0	-0.0	0.8	-0.0	-0.0	0.0	-1.0	0.0	0.8	-0.0	-0.0
				Wind -X ecc.-	0.1	0.9	0.0	0.7	0.0	0.0	0.1	-0.9	-0.0	0.7	0.0	0.0
				Wind +Y ecc.+	0.7	0.3	-0.9	0.2	-0.7	-0.0	0.7	-0.3	0.9	0.2	-0.7	-0.0
				Wind +Y ecc.-	0.7	-0.2	-0.8	-0.2	-0.7	0.0	0.7	0.2	0.9	-0.2	-0.7	0.0
				Wind -Y ecc.+	-0.7	-0.3	0.9	-0.2	0.7	0.0	-0.7	0.3	-0.9	-0.2	0.7	0.0
				Wind -Y ecc.-	-0.7	0.2	0.8	0.2	0.7	-0.0	-0.7	-0.2	-0.9	0.2	0.7	-0.0
				Earthquake X Mode 1	-0.0	-0.9	0.8	-0.7	-0.6	-0.0	-0.0	0.9	0.8	-0.7	-0.6	-0.0
				Earthquake X Mode 2	1.5	13.5	-1.7	10.8	-1.4	-0.0	1.5	-13.5	1.7	10.8	-1.4	-0.0
				Earthquake X Mode 3	0.7	-0.6	-0.8	-0.5	-0.7	0.0	0.7	0.6	0.9	-0.5	-0.7	0.0
				Earthquake X Mode 4	0.1	0.0	-0.0	0.0	-0.0	0.0	0.1	-0.0	0.0	0.0	-0.0	0.0
				Earthquake X Mode 5	-0.1	-0.4	0.0	-0.3	0.0	0.0	-0.1	0.4	-0.0	-0.3	0.0	0.0
				Earthquake X Mode 6	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake X Mode 7	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake X Mode 8	0.0	0.1	0.1	0.0	0.1	0.0	0.0	-0.1	-0.1	0.0	0.1	0.0
				Earthquake X Mode 9	0.0	0.4	-0.1	0.3	-0.1	-0.0	0.0	-0.4	0.1	0.3	-0.1	-0.0
				Earthquake Y Mode 1	-0.0	-0.4	-0.4	-0.3	-0.3	-0.0	-0.0	0.4	0.4	-0.3	-0.3	-0.0
				Earthquake Y Mode 2	0.5	4.2	-0.5	3.3	-0.4	-0.0	0.5	-4.2	0.5	3.3	-0.4	-0.0
				Earthquake Y Mode 3	4.3	-3.8	-5.1	-3.0	-4.2	0.0	4.3	3.8	5.3	-3.0	-4.2	0.0
				Earthquake Y Mode 4	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0
				Earthquake Y Mode 5	-0.0	-0.1	0.0	-0.1	0.0	0.0	-0.0	0.1	-0.0	-0.1	0.0	0.0
				Earthquake Y Mode 6	-0.3	0.1	0.3	0.1	0.2	-0.0	-0.3	-0.1	-0.1	0.1	0.2	-0.0
				Earthquake Y Mode 7	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake Y Mode 8	0.0	0.1	0.2	0.1	0.2	0.0	0.0	-0.1	-0.2	0.1	0.2	0.0
				Earthquake Y Mode 9	0.0	0.1	-0.0	0.1	-0.0	-0.0	0.0	-0.1	0.0	0.1	-0.0	-0.0
Floor 2	30x30	3.00/5.50	Self weight	423.6	-0.0	0.6	-0.0	0.5	0.0	0.0	418.1	-0.0	-0.7	-0.0	0.5	0.0
				Dead load	145.4	0.1	0.8	0.1	0.6	0.0	145.4	-0.1	-0.8	0.1	0.6	0.0
				Live load	200.9	-0.0	0.6	-0.0	0.5	0.0	200.9	0.0	-0.6	-0.0	0.5	0.0
				Wind +X ecc.+	-0.1	-1.1	0.0	-0.9	0.0	0.0	-0.1	1.1	-0.0	-0.9	0.0	0.0
				Wind +X ecc.-	-0.1	-0.9	-0.0	-0.8	0.0	-0.0	-0.1	0.9	-0.0	-0.8	0.0	-0.0
				Wind -X ecc.+	0.1	1.1	-0.0	0.9	-0.0	-0.0	0.1	-1.1	0.0	0.9	-0.0	-0.0
				Wind -X ecc.-	0.1	0.9	0.0	0.8	-0.0	0.0	0.1	-0.9	0.0	0.8	-0.0	0.0
				Wind +Y ecc.+	0.8	0.3	-1.1	0.2	-0.9	-0.0	0.8	-0.3	1.1	0.2	-0.9	-0.0
				Wind +Y ecc.-	0.9	-0.3	-1.1	-0.2	-0.8	0.0	0.9	0.3	1.0	-0.2	-0.8	0.0
				Wind -Y ecc.+	-0.8	-0.3	1.1	-0.2	0.9	0.0	-0.8	0.3	-1.1	-0.2	0.9	0.0
				Wind -Y ecc.-	-0.9	0.3	1.1	0.2	0.8	-0.0	-0.9	-0.3	-1.0	0.2	0.8	-0.0
				Earthquake X Mode 1	-0.1	-0.8	-0.8	-0.7	-0.6	-0.0	-0.1	0.8	0.7	-0.7	-0.6	-0.0
				Earthquake X Mode 2	1.8	13.2	-1.8	10.6	-1.4	-0.0	1.8	-13.2	1.7	10.6	-1.4	-0.0
				Earthquake X Mode 3	0.9	-0.6	-0.9	-0.5	-0.7	0.0	0.9	0.6	0.9	-0.5	-0.7	0.0
				Earthquake X Mode 4	0.1	-0.0	-0.0	-0.0	-0.0	-0.0	0.1	0.0	0.0	-0.0	-0.0	-0.0
				Earthquake X Mode 5	-0.1	0.9	-0.1	0.7	-0.1	-0.0	-0.1	-0.9	0.1	0.7	-0.1	-0.0
				Earthquake X Mode 6	-0.1	-0.0	-0.1	-0.0	-0.0	0.0	-0.1	0.0	0.1	-0.0	-0.0	0.0
				Earthquake X Mode 7	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake X Mode 8	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake X Mode 9	-0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	-0.0
				Earthquake Y Mode 1	-0.1	-0.4	-0.4	-0.3	-0.3	-0.0	-0.1	0.4	0.3	-0.3	-0.3	-0.0
				Earthquake Y Mode 2	0.6	4.1	-0.6	3.3	-0.4	-0.0	0.6	-4.1	0.5	3.3	-0.4	-0.0
				Earthquake Y Mode 3	5.4	-3.8	-5.8	-3.								



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	30x30	0.00/2.50	Self weight	546.2	-0.0	0.2	-0.0	0.2	0.0	540.7	0.0	-0.4	-0.0	0.2	0.0
				Dead load	159.9	0.0	0.3	0.0	0.4	0.0	159.9	-0.0	-0.6	0.0	0.4	0.0
				Live load	270.9	-0.0	0.2	-0.0	0.2	0.0	270.9	0.0	-0.4	-0.0	0.2	0.0
				Wind +X ecc.+	-0.1	-0.7	0.0	-0.6	0.0	0.0	-0.1	0.7	-0.0	-0.6	0.0	0.0
				Wind +X ecc.-	-0.1	-0.6	0.0	-0.5	0.0	-0.0	-0.1	0.6	-0.0	-0.5	0.0	-0.0
				Wind -X ecc.+	0.1	0.7	-0.0	0.6	-0.0	-0.0	0.1	-0.7	0.0	0.6	-0.0	-0.0
				Wind -X ecc.-	0.1	0.6	-0.0	0.5	-0.0	0.0	0.1	-0.6	0.0	0.5	-0.0	0.0
				Wind +Y ecc.+	0.9	0.2	-1.0	0.1	-0.7	-0.0	0.9	-0.1	0.7	0.1	-0.7	-0.0
				Wind +Y ecc.-	1.0	-0.2	-1.1	-0.2	-0.7	0.0	1.0	0.2	0.8	-0.2	-0.7	0.0
				Wind -Y ecc.+	-0.9	-0.2	1.0	-0.1	0.7	0.0	-0.9	0.1	-0.7	-0.1	0.7	0.0
				Wind -Y ecc.-	-1.0	0.2	1.1	0.2	0.7	-0.0	-1.0	-0.2	-0.8	0.2	0.7	-0.0
				Earthquake X Mode 1	-0.2	-0.4	-0.4	-0.4	-0.3	-0.0	-0.2	0.5	0.3	-0.4	-0.3	-0.0
				Earthquake X Mode 2	1.9	7.8	-1.3	6.3	-0.9	-0.0	1.9	-7.9	0.9	6.3	-0.9	-0.0
				Earthquake X Mode 3	1.0	-0.4	-0.8	-0.3	-0.6	0.0	1.0	0.4	0.6	-0.3	-0.6	0.0
				Earthquake X Mode 4	0.1	-0.0	0.0	-0.0	0.0	-0.0	0.1	0.0	-0.0	-0.0	0.0	-0.0
				Earthquake X Mode 5	-0.1	1.0	-0.1	0.8	-0.1	-0.0	-0.1	-1.0	0.1	0.8	-0.1	-0.0
				Earthquake X Mode 6	-0.1	-0.0	-0.1	-0.0	-0.1	0.0	-0.1	0.0	0.1	-0.0	-0.1	0.0
				Earthquake X Mode 7	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake X Mode 8	0.0	-0.0	-0.1	-0.0	-0.1	0.0	0.0	0.0	0.1	-0.0	-0.1	0.0
				Earthquake X Mode 9	-0.0	-0.3	0.1	-0.2	0.0	0.0	-0.0	0.3	-0.1	-0.2	0.0	0.0
				Earthquake Y Mode 1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.0	-0.1	0.2	0.1	-0.2	-0.1	-0.0
				Earthquake Y Mode 2	0.6	2.4	-0.4	1.9	-0.3	-0.0	0.6	-2.4	0.3	1.9	-0.3	-0.0
				Earthquake Y Mode 3	6.0	-2.4	-5.2	-1.9	-3.5	0.0	6.0	2.4	3.6	-1.9	-3.5	0.0
				Earthquake Y Mode 4	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0
				Earthquake Y Mode 5	-0.0	0.2	-0.0	0.1	-0.0	-0.0	-0.0	-0.2	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 6	-0.5	-0.2	-0.8	-0.1	-0.5	0.0	-0.5	0.2	0.6	-0.1	-0.5	0.0
				Earthquake Y Mode 7	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0
				Earthquake Y Mode 8	0.0	-0.1	-0.2	-0.1	-0.2	0.0	0.0	0.1	0.2	-0.1	-0.2	0.0
				Earthquake Y Mode 9	-0.0	-0.1	0.0	-0.1	0.0	0.0	-0.0	0.1	-0.0	-0.1	0.0	0.0
C22	techo	50x50	12.00/14.50	Self weight	132.7	-10.2	12.2	-6.7	8.3	0.0	117.4	6.5	-8.5	-6.7	8.3	0.0
				Dead load	106.4	-0.9	4.2	-1.3	4.1	-0.0	106.4	2.3	-6.0	-1.3	4.1	-0.0
				Live load	26.4	-4.7	5.9	-3.1	3.6	0.0	26.4	2.9	-3.0	-3.1	3.6	0.0
				Wind +X ecc.+	-0.9	-1.0	0.2	-0.7	0.2	0.0	-0.9	0.8	-0.1	-0.7	0.2	0.0
				Wind +X ecc.-	-0.8	-0.9	0.1	-0.6	0.0	-0.0	-0.8	0.7	-0.0	-0.6	0.0	-0.0
				Wind -X ecc.+	0.9	1.0	-0.2	0.7	-0.2	-0.0	0.9	-0.8	0.1	0.7	-0.2	-0.0
				Wind -X ecc.-	0.8	0.9	-0.1	0.6	-0.0	0.0	0.8	-0.7	0.0	0.6	-0.0	0.0
				Wind +Y ecc.+	0.9	0.7	-2.8	0.5	-1.9	-0.0	0.9	-0.5	1.9	0.5	-1.9	-0.0
				Wind +Y ecc.-	0.4	0.1	-2.0	0.0	-1.4	0.0	0.4	-0.0	1.4	0.0	-1.4	0.0
				Wind -Y ecc.+	-0.9	-0.7	2.8	-0.5	1.9	0.0	-0.9	0.5	-1.9	-0.5	1.9	0.0
				Wind -Y ecc.-	-0.4	-0.1	2.0	-0.0	1.4	-0.0	-0.4	0.0	-1.4	-0.0	1.4	-0.0
				Earthquake X Mode 1	0.2	-0.1	-5.1	-0.1	-3.4	-0.1	0.2	0.2	3.4	-0.1	-3.4	-0.1
				Earthquake X Mode 2	15.7	18.2	-10.3	12.5	-6.8	-0.1	15.7	-13.0	6.6	12.5	-6.8	-0.1
				Earthquake X Mode 3	-0.1	-0.5	-2.1	-0.4	-1.4	0.0	-0.1	0.4	1.5	-0.4	-1.4	0.0
				Earthquake X Mode 4	0.0	0.1	0.9	0.1	0.5	0.0	0.0	-0.0	-0.5	0.1	0.5	0.0
				Earthquake X Mode 5	-3.3	-4.8	1.7	-3.1	1.1	0.0	-3.3	2.9	-1.0	-3.1	1.1	0.0
				Earthquake X Mode 6	-0.0	0.1	0.5	0.0	0.3	-0.0	-0.0	-0.0	-0.3	0.0	0.3	-0.0
				Earthquake X Mode 7	-0.0	0.0	-0.1	0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0	-0.0
				Earthquake X Mode 8	-0.1	-0.2	-0.6	-0.1	-0.4	-0.0	-0.1	0.1	0.3	-0.1	-0.4	-0.0
				Earthquake X Mode 9	-0.8	-1.6	0.7	-0.9	0.4	0.0	-0.8	0.7	-0.3	-0.9	0.4	0.0
				Earthquake Y Mode 1	0.1	-0.0	-2.3	-0.0	-1.5	-0.0	0.1	0.1	1.6	-0.0	-1.5	-0.0
				Earthquake Y Mode 2	4.8	5.6	-3.2	3.9	-2.1	-0.0	4.8	-4.0	2.0	3.9	-2.1	-0.0
				Earthquake Y Mode 3	-0.4	-3.1	-13.1	-2.2	-8.8	0.0	-0.4	2.4	9.0	-2.2	-8.8	0.0
				Earthquake Y Mode 4	0.0	0.0	0.2	0.0	0.1	0.0	0.0	-0.0	-0.1	0.0	0.1	0.0
				Earthquake Y Mode 5	-0.6	-0.9	0.3	-0.6	0.2	0.0	-0.6	0.5	-0.2	-0.6	0.2	0.0
				Earthquake Y Mode 6	-0.1	0.5	4.3	0.3	2.7	-0.0	-0.1	-0.3	-2.5	0.3	2.7	-0.0
				Earthquake Y Mode 7	-0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0	-0.0
				Earthquake Y Mode 8	-0.2	-0.5	-1.6	-0.3	-0.9	-0.0	-0.2	0.2	0.7	-0.3	-0.9	-0.0
				Earthquake Y Mode 9	-0.3	-0.6	0.3	-0.3	0.2	0.0	-0.3	0.3	-0.1	-0.3	0.2	0.0
	Floor 4	50x50	9.00/11.50	Self weight	256.9	-9.7	12.3	-7.9	9.8	0.0	241.5	10.1	-12.3	-7.9	9.8	0.0
				Dead load	150.2	2.2	-0.6	1.8	-0.7	-0.0	150.2	-2.4	1.3	1.8	-0.7	-0.0
				Live load	85.9	-5.0	7.1	-4.1	5.8	0.0	85.9	5.2	-7.3	-4.1	5.8	0.0
				Wind +X ecc.+	-2.1	-1.8	0.3	-1.6	0.2	0.0	-2.1	2.1	-0.3	-1.6	0.2	0.0
				Wind +X ecc.-	-1.8	-1.6	-0.0	-1.4	-0.0	-0.0	-1.8	1.9	0.1	-1.4	-0.0	-0.0
				Wind -X ecc.+	2.1	1.8	-0.3	1.6	-0.2	-0.0	2.1	-2.1	0.3	1.6	-0.2	-0.0
				Wind -X ecc.-	1.8	1.6	0.0	1.4	0.0	0.0	1.8	-1.9	-0.1	1.4	0.0	0.0
				Wind +Y ecc.+	2.3	1.0	-5.0	0.8	-4.3	-0.0	2.3	-1.1	5.8	0.8	-4.3	-0.0
				Wind +Y ecc.-	1.0	-0.0	-3.6	-0.1	-3.1	0.0	1.0	0.1	4.2	-0.1	-3.1	0.0
				Wind -Y ecc.+	-2.3	-1.0	5.0	-0.8	4.3	0.0	-2.3	1.1	-5.8	-0.8	4.3	0.0
				Wind -Y ecc.-	-1.0	0.0	3.6	0.1	3.1	-0.0	-1.0	-0.1	4.2	0.1	3.1	-0.0
				Earthquake X Mode 1	0.7	-0.7	-8.8	-0.7	-7.5	-0.1	0.7	0.9	9.9	-0.7	-7.5	-0.1
				Earthquake X Mode 2	36.0	28.6	-15.6	24.3	-13.1	-0.1	36.0	-32.3	17.1	24.3	-13.1	-0.1
				Earthquake X Mode 3	-0.0	-0.9	-3.8	-0.8	-3.2	0.0	-0.0	1.1	4.3	-0.8	-3.2	0.0
				Earthquake X Mode 4	0.0	0.1	1.0	0.1	0.7	0.0	0.0	-0.1	-0.8	0.1	0.7	0.0
				Earthquake X Mode 5	-6.5	-5.2	1.8	-3.7	1.4	0.0	-6.5	4.0	-1.6	-3.7	1.4	0.0
				Earthquake X Mode 6	-0.0	0.1	0.6	0.1	0.5	-0.0	-0.0	-0.1	-0.5	0.1	0.5	-0.0
				Earthquake X Mode 7	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	-0.1	-0.0	0.0	0.0
				Earthquake X Mode 8	-0.1	-0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	-1.1	-0.1	0.0	0.2	-0.1	-0.0	-1.1	-0.6	0.2	0.2	-0.1	-0.0
				Earthquake Y Mode 1	0.3	-0.3	-4.0	-0.3	-3.4	-0.1	0.3	0.4	4.5	-0.3	-3.4	-0.1
				Earthquake Y Mode 2	11.1	8.8	-4.8	7.5	-4.0	-0.0	11.1	-10.0	5.3	7.5	-4.0	-0.0
				Earthquake Y Mode 3	-0.1	-5.6	-23.									



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.50	Self weight	380.9	-8.1	10.9	-6.7	8.8	0.0	365.6	8.7	-11.2	-6.7	8.8	0.0	
				Dead load	195.4	2.4	-0.0	1.8	0.2	-0.0	195.4	-2.1	-0.4	1.8	0.2	-0.0
				Live load	145.0	-4.2	6.2	-3.5	5.0	0.0	145.0	4.5	-6.3	-3.5	5.0	0.0
				Wind +X ecc.+	-3.6	-2.4	0.3	-2.0	0.2	0.0	-3.6	2.7	-0.3	-2.0	0.2	0.0
				Wind +X ecc.-	-3.1	-2.1	-0.1	-1.8	-0.1	-0.0	-3.1	2.3	0.1	-1.8	-0.1	-0.0
				Wind -X ecc.+	3.6	2.4	-0.3	2.0	-0.2	-0.0	3.6	-2.7	0.3	2.0	-0.2	-0.0
				Wind -X ecc.-	3.1	2.1	0.1	1.8	0.1	0.0	3.1	-2.3	-0.1	1.8	0.1	0.0
				Wind +Y ecc.+	3.9	1.1	-6.6	0.9	-5.5	-0.0	3.9	-1.2	7.1	0.9	-5.5	-0.0
				Wind +Y ecc.-	1.6	-0.2	-4.9	-0.2	-4.1	0.0	1.6	0.3	5.3	-0.2	-4.1	0.0
				Wind -Y ecc.+	-3.9	-1.1	6.6	-0.9	5.5	0.0	-3.9	1.2	-7.1	-0.9	5.5	0.0
				Wind -Y ecc.-	-1.6	0.2	4.9	0.2	4.1	-0.0	-1.6	-0.3	-5.3	0.2	4.1	-0.0
				Earthquake X Mode 1	1.0	-1.3	-10.9	-1.0	-8.8	-0.2	1.0	1.3	11.1	-1.0	-8.8	-0.2
				Earthquake X Mode 2	60.2	35.3	-17.9	28.8	-14.5	-0.1	60.2	-36.6	18.4	28.8	-14.5	-0.1
				Earthquake X Mode 3	-0.0	-1.2	-4.8	-1.0	-3.9	0.0	-0.0	1.3	5.0	-1.0	-3.9	0.0
				Earthquake X Mode 4	0.0	0.0	0.3	-0.0	0.1	0.0	0.0	0.0	0.0	-0.0	0.1	0.0
				Earthquake X Mode 5	-8.2	-1.8	0.6	-0.7	0.3	0.0	-8.2	-0.1	-0.2	-0.7	0.3	0.0
				Earthquake X Mode 6	-0.1	0.0	0.2	0.0	0.1	-0.0	-0.1	0.0	-0.0	0.0	0.1	-0.0
				Earthquake X Mode 7	-0.0	-0.0	0.1	-0.0	0.1	0.0	-0.0	0.0	-0.1	-0.0	0.1	0.0
				Earthquake X Mode 8	-0.0	0.2	0.7	0.2	0.5	0.0	-0.0	-0.2	-0.6	0.2	0.5	0.0
				Earthquake X Mode 9	-0.5	1.6	-0.7	1.2	-0.6	-0.0	-0.5	-1.4	0.7	1.2	-0.6	-0.0
				Earthquake Y Mode 1	0.4	-0.6	-4.9	-0.5	-4.0	-0.1	0.4	0.6	5.1	-0.5	-4.0	-0.1
				Earthquake Y Mode 2	18.6	10.9	-5.5	8.9	-4.5	-0.0	18.6	-11.3	5.7	8.9	-4.5	-0.0
				Earthquake Y Mode 3	-0.1	-7.4	-29.3	-6.1	-24.0	0.1	-0.1	7.9	30.6	-6.1	-24.0	0.1
				Earthquake Y Mode 4	0.0	0.0	0.1	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0
				Earthquake Y Mode 5	-1.5	-0.3	0.1	-0.1	0.1	0.0	-1.5	-0.0	-0.0	-0.1	0.1	0.0
				Earthquake Y Mode 6	-0.6	0.3	2.1	0.1	1.0	-0.0	-0.6	0.0	-0.4	0.1	1.0	-0.0
				Earthquake Y Mode 7	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0
				Earthquake Y Mode 8	-0.1	0.6	1.6	0.4	1.3	0.0	-0.1	-0.5	-1.6	0.4	1.3	0.0
				Earthquake Y Mode 9	-0.2	0.6	-0.3	0.4	-0.2	-0.0	-0.2	-0.5	0.3	0.4	-0.2	-0.0
Floor 2	50x50	3.00/5.50	Self weight	504.4	-6.2	10.0	-5.2	7.9	0.0	489.1	6.8	-9.8	-5.2	7.9	0.0	
				Dead load	240.7	3.5	-0.8	2.6	-0.5	0.0	240.7	-3.0	0.5	2.6	-0.5	0.0
				Live load	204.0	-3.3	5.9	-2.8	4.7	0.0	204.0	3.6	-5.7	-2.8	4.7	0.0
				Wind +X ecc.+	-5.4	-3.0	0.2	-2.3	0.2	0.0	-5.4	2.8	-0.3	-2.3	0.2	0.0
				Wind +X ecc.-	-4.7	-2.7	-0.2	-2.1	-0.1	-0.0	-4.7	2.5	0.1	-2.1	-0.1	-0.0
				Wind -X ecc.+	5.4	3.0	-0.2	2.3	-0.2	-0.0	5.4	-2.8	0.3	2.3	-0.2	-0.0
				Wind -X ecc.-	4.7	2.7	0.2	2.1	0.1	0.0	4.7	-2.5	-0.1	2.1	0.1	0.0
				Wind +Y ecc.+	5.6	1.2	-8.1	0.9	-6.3	-0.0	5.6	-1.1	7.8	0.9	-6.3	-0.0
				Wind +Y ecc.-	2.2	-0.4	-6.1	-0.4	-4.8	0.0	2.2	0.5	5.9	-0.4	-4.8	0.0
				Wind -Y ecc.+	-5.6	-1.2	8.1	-0.9	6.3	0.0	-5.6	1.1	-7.8	-0.9	6.3	0.0
				Wind -Y ecc.-	-2.2	0.4	6.1	0.4	4.8	-0.0	-2.2	-0.5	-5.9	0.4	4.8	-0.0
				Earthquake X Mode 1	1.1	-1.6	-11.9	-1.2	-9.0	-0.2	1.1	1.3	10.6	-1.2	-9.0	-0.2
				Earthquake X Mode 2	85.7	39.0	-18.5	29.7	-14.4	-0.1	85.7	-35.2	17.4	29.7	-14.4	-0.1
				Earthquake X Mode 3	-0.1	-1.5	-5.4	-1.1	-4.2	0.0	-0.1	1.3	5.1	-1.1	-4.2	0.0
				Earthquake X Mode 4	0.0	-0.1	-0.6	-0.1	-0.5	-0.0	0.0	0.1	0.7	-0.1	-0.5	-0.0
				Earthquake X Mode 5	-7.4	2.6	-0.8	2.5	-0.7	-0.0	-7.4	-3.6	1.0	2.5	-0.7	-0.0
				Earthquake X Mode 6	-0.1	-0.0	-0.3	-0.0	-0.3	0.0	-0.1	0.1	0.4	-0.0	-0.3	0.0
				Earthquake X Mode 7	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake X Mode 8	0.0	0.1	0.2	0.0	0.1	-0.0	0.0	0.0	0.0	0.0	0.1	-0.0
				Earthquake X Mode 9	-0.1	0.4	-0.2	0.1	-0.0	-0.0	-0.1	0.2	-0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	0.5	-0.7	-5.4	-0.5	-4.1	-0.1	0.5	0.6	4.8	-0.5	-4.1	-0.1
				Earthquake Y Mode 2	26.5	12.1	-5.7	9.2	-4.4	-0.0	26.5	-10.9	5.4	9.2	-4.4	-0.0
				Earthquake Y Mode 3	-0.6	-9.0	-33.4	-6.9	-25.8	0.1	-0.6	8.2	31.2	-6.9	-25.8	0.1
				Earthquake Y Mode 4	0.0	-0.0	-0.1	-0.0	-0.1	-0.0	0.0	0.0	0.1	-0.0	-0.1	-0.0
				Earthquake Y Mode 5	-1.3	0.5	-0.2	0.5	-0.1	-0.0	-1.3	-0.7	0.2	0.5	-0.1	-0.0
				Earthquake Y Mode 6	-0.7	-0.3	-2.5	-0.4	-2.4	0.0	-0.7	0.6	3.5	-0.4	-2.4	0.0
				Earthquake Y Mode 7	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake Y Mode 8	0.0	0.2	0.5	0.1	0.2	-0.0	0.0	0.1	0.1	0.1	0.2	-0.0
				Earthquake Y Mode 9	-0.0	0.1	-0.1	0.0	-0.0	-0.0	-0.0	0.1	-0.0	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.50	Self weight	628.0	-2.4	3.9	-2.5	4.5	0.0	612.6	3.8	-7.3	-2.5	4.5	0.0	
				Dead load	287.0	1.7	-0.5	1.9	-0.5	0.0	287.0	-3.0	0.6	1.9	-0.5	0.0
				Live load	262.9	-1.3	2.4	-1.3	2.7	0.0	262.9	2.0	-4.4	-1.3	2.7	0.0
				Wind +X ecc.+	-7.1	-3.0	0.1	-1.9	0.1	0.0	-7.1	1.7	-0.2	-1.9	0.1	0.0
				Wind +X ecc.-	-6.1	-2.7	-0.2	-1.7	-0.1	-0.0	-6.1	1.5	0.0	-1.7	-0.1	-0.0
				Wind -X ecc.+	7.1	3.0	-0.1	1.9	-0.1	-0.0	7.1	-1.7	0.2	1.9	-0.1	-0.0
				Wind -X ecc.-	6.1	2.7	0.2	1.7	0.1	0.0	6.1	-1.5	-0.0	1.7	0.1	0.0
				Wind +Y ecc.+	6.9	0.9	-7.9	0.6	-5.2	-0.0	6.9	-0.6	5.1	0.6	-5.2	-0.0
				Wind +Y ecc.-	2.5	-0.9	-6.4	-0.5	-4.2	0.0	2.5	0.5	4.1	-0.5	-4.2	0.0
				Wind -Y ecc.+	-6.9	-0.9	7.9	-0.6	5.2	0.0	-6.9	0.6	-5.1	-0.6	5.2	0.0
				Wind -Y ecc.-	-2.5	0.9	6.4	0.5	4.2	-0.0	-2.5	-0.5	-4.1	0.5	4.2	-0.0
				Earthquake X Mode 1	1.0	-1.5	-9.2	-0.8	-5.7	-0.1	1.0	0.5	5.2	-0.8	-5.7	-0.1
				Earthquake X Mode 2	106.3	34.1	-14.0	21.2	-9.4	-0.1	106.3	-19.0	9.5	21.2	-9.4	-0.1
				Earthquake X Mode 3	-0.3	-1.6	-5.1	-1.0	-3.3	0.0	-0.3	0.9	3.1	-1.0	-3.3	0.0
				Earthquake X Mode 4	-0.0	-0.1	-0.8	-0.1	-0.5	-0.0	-0.0	0.1	0.5	-0.1	-0.5	-0.0
				Earthquake X Mode 5	-5.2	4.8	-1.3	3.2	-0.9	-0.0	-5.2	-3.2	1.0	3.2	-0.9	-0.0
				Earthquake X Mode 6	-0.1	-0.1	-0.6	-0.1	-0.4	0.0	-0.1	0.1	0.4	-0.1	-0.4	0.0
				Earthquake X Mode 7	-0.0	0.0	-0.1	0.0	-0.0	-0.0	-0.0	-0.0	0.1	0.0	-0.0	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.6	-0.2	-0.4	0.0	-0.0	0.2	0.5	-0.2	-0.4	0.0
				Earthquake X Mode 9	-0.5	-1.5	0.6	-1.1	0.5	0.0	-0.5	1.2	-0.5	-1.1	0.5	0.0
				Earthquake Y Mode 1	0.5	-0.7	-4.2	-0.4	-2.6	-0.0	0.5	0.2	2.4	-0.4	-2.6	-0.0
				Earthquake Y Mode 2	32.8	10.5	-4.3	6.6	-2.9	-0.0	32.8	-5.9	2.9	6.6	-2.9	-0.0
				Earthquake Y Mode 3	-2.1	-9.8	-31.2	-6.0	-20.2	0.1	-2.1	5.3	19.2	-6.0	-20.2	0.1
				Earthquake Y Mode 4	-0.0	-0.0	-0.2	-0								



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
C23	techo	50x50	12.00/14.40	Self weight	139.2	1.3	-9.6	0.9	-6.1	0.0	124.5	-0.9	5.0	0.9	-6.1	0.0			
				Dead load	129.7	0.8	-6.4	0.8	-5.6	-0.0	129.7	-1.0	7.0	0.8	-5.6	-0.0			
				Live load	23.7	0.6	-3.6	0.4	-1.8	0.0	23.7	-0.3	0.8	0.4	-1.8	0.0			
				Wind +X ecc.+	0.3	-1.6	0.1	-1.1	0.1	0.0	0.3	1.0	-0.1	-1.1	0.1	0.0			
				Wind +X ecc.-	0.3	-1.5	-0.3	-1.0	-0.2	-0.0	0.3	0.9	0.2	-1.0	-0.2	-0.0			
				Wind -X ecc.+	-0.3	1.6	-0.1	1.1	-0.1	-0.0	-0.3	-1.0	0.1	1.1	-0.1	-0.0			
				Wind -X ecc.-	-0.3	1.5	0.3	1.0	0.2	0.0	-0.3	-0.9	-0.2	1.0	0.2	0.0			
				Wind +Y ecc.+	0.9	0.5	-3.4	0.3	-2.4	-0.0	0.9	-0.3	2.4	0.3	-2.4	-0.0			
				Wind +Y ecc.-	0.6	-0.3	-1.7	-0.2	-1.2	0.0	0.6	0.2	1.2	-0.2	-1.2	0.0			
				Wind -Y ecc.+	-0.9	-0.5	3.4	-0.3	2.4	0.0	-0.9	0.3	-2.4	-0.3	2.4	0.0			
				Wind -Y ecc.-	-0.6	0.3	1.7	0.2	1.2	-0.0	-0.6	-0.2	-1.2	0.2	1.2	-0.0			
				Earthquake X Mode 1	2.9	-1.6	-10.6	-1.1	-7.5	-0.1	2.9	1.0	7.4	-1.1	-7.5	-0.1			
				Earthquake X Mode 2	-2.6	26.3	-12.0	17.6	-8.7	-0.1	-2.6	-15.9	8.8	17.6	-8.7	-0.1			
				Earthquake X Mode 3	0.8	-1.1	-1.7	-0.8	-1.2	0.0	0.8	0.7	1.2	-0.8	-1.2	0.0			
				Earthquake X Mode 4	-0.3	0.2	2.4	0.1	1.5	0.0	-0.3	-0.1	-1.4	0.1	1.5	0.0			
				Earthquake X Mode 5	2.0	-6.5	2.5	-4.2	1.7	0.0	2.0	3.6	-1.6	-4.2	1.7	0.0			
				Earthquake X Mode 6	-0.1	0.1	0.5	0.1	0.3	-0.0	-0.1	-0.1	-0.3	0.1	0.3	-0.0			
				Earthquake X Mode 7	-0.0	0.0	-0.6	0.0	-0.4	-0.0	-0.0	-0.0	0.2	0.0	-0.4	-0.0			
				Earthquake X Mode 8	0.1	-0.3	-0.7	-0.2	-0.4	-0.0	0.1	0.1	0.3	-0.2	-0.4	-0.0			
				Earthquake X Mode 9	0.7	-1.9	1.1	-1.1	0.6	0.0	0.7	0.9	-0.5	-1.1	0.6	0.0			
				Earthquake Y Mode 1	1.3	-0.7	-4.8	-0.5	-3.4	-0.0	1.3	0.5	3.3	-0.5	-3.4	-0.0			
				Earthquake Y Mode 2	-0.8	8.1	-3.7	5.4	-2.7	-0.0	-0.8	-4.9	2.7	5.4	-2.7	-0.0			
				Earthquake Y Mode 3	4.9	-6.9	-10.6	-4.7	-7.5	0.0	4.9	4.3	7.4	-4.7	-7.5	0.0			
				Earthquake Y Mode 4	-0.1	0.0	0.5	0.0	0.3	0.0	-0.1	-0.0	-0.3	0.0	0.3	0.0			
				Earthquake Y Mode 5	0.4	-1.2	0.5	-0.8	0.3	0.0	0.4	0.6	-0.3	-0.8	0.3	0.0			
				Earthquake Y Mode 6	-0.8	1.0	4.0	0.6	2.6	-0.0	-0.8	-0.6	-2.3	0.6	2.6	-0.0			
				Earthquake Y Mode 7	-0.0	0.0	-0.2	0.0	-0.1	-0.0	-0.0	-0.0	0.1	0.0	-0.1	-0.0			
				Earthquake Y Mode 8	0.3	-0.7	-1.6	-0.4	-1.0	-0.0	0.3	0.3	0.7	-0.4	-1.0	-0.0			
				Earthquake Y Mode 9	0.3	-0.7	0.4	-0.4	0.2	0.0	0.3	0.3	-0.2	-0.4	0.2	0.0			
				Floor 4	50x50	9.00/11.50	Self weight	278.3	1.3	-10.7	1.0	-8.7	0.0	263.0	-1.2	11.0	1.0	-8.7	0.0
							Dead load	141.2	-0.2	-0.5	-0.3	0.0	-0.0	141.2	0.4	-0.6	-0.3	0.0	-0.0
							Live load	90.7	0.7	-6.2	0.6	-5.1	0.0	90.7	-0.7	6.6	0.6	-5.1	0.0
Wind +X ecc.+	1.1	-2.6	0.1				-2.2	0.0	0.0	1.1	2.9	-0.0	-2.2	0.0	0.0				
Wind +X ecc.-	1.1	-2.3	-0.5				-2.0	-0.5	-0.0	1.1	2.6	0.7	-2.0	-0.5	-0.0				
Wind -X ecc.+	-1.1	2.6	-0.1				2.2	-0.0	-0.0	-1.1	-2.9	0.0	2.2	-0.0	-0.0				
Wind -X ecc.-	-1.1	2.3	0.5				2.0	0.5	0.0	-1.1	-2.6	-0.7	2.0	0.5	0.0				
Wind +Y ecc.+	0.5	0.9	-5.4				0.7	-4.7	-0.0	0.5	-0.9	6.4	0.7	-4.7	-0.0				
Wind +Y ecc.-	0.7	-0.4	-2.7				-0.4	-2.3	0.0	0.7	0.5	3.1	-0.4	-2.3	0.0				
Wind -Y ecc.+	-0.5	-0.9	5.4				-0.7	4.7	0.0	-0.5	0.9	-6.4	-0.7	4.7	0.0				
Wind -Y ecc.-	-0.7	0.4	2.7				0.4	2.3	-0.0	-0.7	-0.5	-3.1	0.4	2.3	-0.0				
Earthquake X Mode 1	3.1	-2.3	-16.7				-1.9	-14.3	-0.1	3.1	2.6	19.1	-1.9	-14.3	-0.1				
Earthquake X Mode 2	-16.4	39.6	-17.0				32.9	-14.3	-0.1	-16.4	-42.6	18.8	32.9	-14.3	-0.1				
Earthquake X Mode 3	1.3	-1.6	-2.8				-1.4	-2.4	0.0	1.3	1.8	3.2	-1.4	-2.4	0.0				
Earthquake X Mode 4	-0.1	0.2	2.6				0.2	1.8	0.0	-0.1	-0.2	-2.0	0.2	1.8	0.0				
Earthquake X Mode 5	5.0	-6.5	2.5				-4.8	1.8	0.0	5.0	5.6	-1.9	-4.8	1.8	0.0				
Earthquake X Mode 6	-0.1	0.1	0.5				0.1	0.4	-0.0	-0.1	-0.1	-0.4	0.1	0.4	-0.0				
Earthquake X Mode 7	-0.0	-0.0	-0.0				-0.0	0.1	0.0	-0.0	0.0	-0.2	-0.0	0.1	0.0				
Earthquake X Mode 8	0.1	-0.0	-0.1				0.0	0.1	0.0	0.1	-0.1	-0.2	0.0	0.1	0.0				
Earthquake X Mode 9	1.0	0.1	0.0				0.2	-0.1	-0.0	1.0	-0.5	0.4	0.2	-0.1	-0.0				
Earthquake Y Mode 1	1.4	-1.0	-7.6				-0.9	-6.5	-0.1	1.4	1.2	8.7	-0.9	-6.5	-0.1				
Earthquake Y Mode 2	-5.1	12.2	-5.2				10.2	-4.4	-0.0	-5.1	-13.2	5.8	10.2	-4.4	-0.0				
Earthquake Y Mode 3	7.8	-10.0	-17.0				-8.4	-14.6	0.1	7.8	10.9	19.5	-8.4	-14.6	0.1				
Earthquake Y Mode 4	-0.0	0.0	0.5				0.0	0.4	0.0	-0.0	-0.0	-0.4	0.0	0.4	0.0				
Earthquake Y Mode 5	0.9	-1.2	0.5				-0.9	0.3	0.0	0.9	1.0	-0.3	-0.9	0.3	0.0				
Earthquake Y Mode 6	-0.7	1.1	4.5				0.8	3.2	-0.0	-0.7	-0.9	-3.6	0.8	3.2	-0.0				
Earthquake Y Mode 7	-0.0	-0.0	-0.0				-0.0	0.0	0.0	-0.0	0.0	-0.1	-0.0	0.0	0.0				
Earthquake Y Mode 8	0.3	-0.0	-0.2				0.1	0.1	0.0	0.3	-0.2	-0.5	0.1	0.1	0.0				
Earthquake Y Mode 9	0.3	0.0	0.0				0.1	-0.1	-0.0	0.3	-0.2	0.1	0.1	-0.1	-0.0				
Floor 3	50x50	6.00/8.50	Self weight				419.5	1.2	-10.9	1.0	-8.8	0.0	404.2	-1.3	11.1	1.0	-8.8	0.0	
			Dead load				155.3	-0.1	-1.4	-0.1	-1.1	-0.0	155.3	0.1	1.4	-0.1	-1.1	-0.0	
			Live load				157.9	0.6	-5.9	0.5	-4.8	0.0	157.9	-0.7	6.0	0.5	-4.8	0.0	
			Wind +X ecc.+	2.4	-3.4	0.1	-2.8	0.1	0.0	2.4	3.6	-0.1	-2.8	0.1	0.0				
			Wind +X ecc.-	2.1	-3.0	-0.7	-2.5	-0.6	-0.0	2.1	3.2	0.8	-2.5	-0.6	-0.0				
			Wind -X ecc.+	-2.4	3.4	-0.1	2.8	-0.1	-0.0	-2.4	-3.6	0.1	2.8	-0.1	-0.0				
			Wind -X ecc.-	-2.1	3.0	0.7	2.5	0.6	0.0	-2.1	-3.2	-0.8	2.5	0.6	0.0				
			Wind +Y ecc.+	-0.5	1.1	-7.3	0.9	-6.1	-0.0	-0.5	-1.2	7.9	0.9	-6.1	-0.0				
			Wind +Y ecc.-	0.6	-0.6	-3.5	-0.5	-2.9	0.0	0.6	0.7	3.8	-0.5	-2.9	0.0				
			Wind -Y ecc.+	0.5	-1.1	7.3	-0.9	6.1	0.0	0.5	1.2	-7.9	-0.9	6.1	0.0				
			Wind -Y ecc.-	-0.6	0.6	3.5	0.5	2.9	-0.0	-0.6	-0.7	-3.8	0.5	2.9	-0.0				
			Earthquake X Mode 1	2.3	-2.6	-21.0	-2.2	-17.1	-0.2	2.3	2.8	21.9	-2.2	-17.1	-0.2				
			Earthquake X Mode 2	-36.3	47.8	-21.1	38.6	-17.2	-0.1	-36.3	-48.8	21.9	38.6	-17.2	-0.1				
			Earthquake X Mode 3	1.7	-1.9	-3.5	-1.6	-2.8	0.0	1.7	2.0	3.6	-1.6	-2.8	0.0				
			Earthquake X Mode 4	-0.0	0.1	1.0	0.0	0.4	0.0	-0.0	-0.0	-0.0	0.0	0.4	0.0				
			Earthquake X Mode 5	6.2	-1.9	0.9	-1.0	0.4	0.0	6.2	0.5	0.0	-1.0	0.4	0.0				
			Earthquake X Mode 6	-0.1	0.1	0.2	0.0	0.1	-0.0	-0.1	-0.0	-0.0	0.0	0.1	-0.0				
			Earthquake X Mode 7	0.1	-0.0	0.6	-0.0	0.4	0.0	0.1	0.0	-0.5	-0.0	0.4	0.0				
			Earthquake X Mode 8	0.1	0.3	0.6	0.2	0.5	0.0	0.1	-0.3	-0.6	0.2	0.5	0.0				
			Earthquake X Mode 9	0.1	1.9	-1.0	1.5	-0.8	-0.0	0.1	-1.8	0.9	1.5	-0.8	-0.0				
			Earthquake Y Mode 1	1.0	-1.2	-9.5	-1.0	-7.8	-0.1	1.0	1.3	9.9	-1.0	-7.8	-0.1				
			Earthquake Y Mode 2	-11.2	14.8	-6.5	11.9	-5.3	-0.0	-11.2	-15.1	6.8	11.9	-5.3	-0.0				
			Earthquake Y Mode 3	10.5	-12.0	-21.3	-9.8	-17.4	0.1	10.5	12.4	22.2	-9.8	-17.4	0.1				
			Earthquake Y Mode 4	-0.0	0.0	0.2	0.0	0.1	0.0	-0.0	-0.0	-0.0	0.0	0.1	0.0				
			Earthquake Y Mode 5	1.1	-0.4	0.2	-0.2	0.1	0.0	1.1	0.1	0.0	-0.2	0.1	0.0				
			Earthquake Y Mode 6	-0.8	0.4	1.8	0.2	0.7	-0.0	-0.8	-0.2	-0.1	0.2	0.7	-0.0				
			Earthquake Y Mode 7	0.0	-0.0	0.2	-0.0	0.1	0.0	0.0	0.0	-0.2	-0.0	0.1	0.0				
			Earthquake Y Mode 8	0.3	0.7	1.6	0.5	1.2	0.0	0.3	-0.6	-1.5	0.5	1.2	0.0				
			Earthquake Y Mode 9	0.0	0.7	-0.4	0.5	-0.3	-0.0	0.0	-0.7	0.3	0.5	-0.3	-0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	50x50	3.00/5.50	Self weight	563.4	1.2	-13.0	1.0	-10.1	0.0	548.1	-1.2	12.3	1.0	-10.1	0.0
				Dead load	169.4	-0.1	-1.4	-0.1	-1.0	0.0	169.4	0.1	1.1	-0.1	-1.0	0.0
				Live load	226.3	0.7	-7.1	0.5	-5.5	0.0	226.3	-0.6	6.7	0.5	-5.5	0.0
				Wind +X ecc.+	4.1	-4.0	0.1	-3.2	0.1	0.0	4.1	3.9	-0.1	-3.2	0.1	0.0
				Wind +X ecc.-	3.5	-3.6	-0.9	-2.8	-0.7	-0.0	3.5	3.4	0.9	-2.8	-0.7	-0.0
				Wind -X ecc.+	-4.1	4.0	-0.1	3.2	-0.1	-0.0	-4.1	-3.9	0.1	3.2	-0.1	-0.0
				Wind -X ecc.-	-3.5	3.6	0.9	2.8	0.7	0.0	-3.5	-3.4	-0.9	2.8	0.7	0.0
				Wind +Y ecc.+	-2.1	1.4	-9.0	1.0	-7.0	-0.0	-2.1	-1.2	8.4	1.0	-7.0	-0.0
				Wind +Y ecc.-	0.4	-0.8	-4.3	-0.6	-3.3	0.0	0.4	0.8	4.1	-0.6	-3.3	0.0
				Wind -Y ecc.+	2.1	-1.4	9.0	-1.0	7.0	0.0	2.1	1.2	-8.4	-1.0	7.0	0.0
				Wind -Y ecc.-	-0.4	0.8	4.3	0.6	3.3	-0.0	-0.4	-0.8	-4.1	0.6	3.3	-0.0
				Earthquake X Mode 1	0.7	-2.6	-23.5	-2.0	-17.8	-0.2	0.7	2.4	21.1	-2.0	-17.8	-0.2
				Earthquake X Mode 2	-60.3	51.2	-23.0	39.7	-17.5	-0.1	-60.3	-47.9	20.7	39.7	-17.5	-0.1
				Earthquake X Mode 3	2.1	-2.1	-3.9	-1.7	-2.9	0.0	2.1	2.0	3.5	-1.7	-2.9	0.0
				Earthquake X Mode 4	-0.2	-0.1	-1.3	-0.1	-1.2	-0.0	-0.2	0.1	1.8	-0.1	-1.2	-0.0
				Earthquake X Mode 5	4.7	3.6	-1.3	3.2	-1.2	-0.0	4.7	-4.3	1.8	3.2	-1.2	-0.0
				Earthquake X Mode 6	-0.1	-0.1	-0.3	-0.0	-0.3	0.0	-0.1	0.1	0.4	-0.0	-0.3	0.0
				Earthquake X Mode 7	0.1	-0.0	0.2	-0.0	0.0	0.0	0.1	0.0	0.1	-0.0	0.0	0.0
				Earthquake X Mode 8	0.1	0.1	0.2	0.0	0.0	-0.0	0.1	0.0	0.1	0.0	0.0	-0.0
				Earthquake X Mode 9	-0.4	0.3	-0.3	0.1	-0.1	-0.0	-0.4	0.1	-0.1	0.1	-0.1	-0.0
				Earthquake Y Mode 1	0.3	-1.2	-10.6	-0.9	-8.1	-0.1	0.3	1.1	9.6	-0.9	-8.1	-0.1
				Earthquake Y Mode 2	-18.6	15.8	-7.1	12.2	-5.4	-0.0	-18.6	-14.8	6.4	12.2	-5.4	-0.0
				Earthquake Y Mode 3	13.1	-13.1	-23.8	-10.3	-18.1	0.1	13.1	12.5	21.5	-10.3	-18.1	0.1
				Earthquake Y Mode 4	-0.0	-0.0	-0.2	-0.0	-0.2	-0.0	-0.0	0.0	0.3	-0.0	-0.2	-0.0
				Earthquake Y Mode 5	0.8	0.7	-0.2	0.6	-0.2	-0.0	0.8	-0.8	0.3	0.6	-0.2	-0.0
				Earthquake Y Mode 6	-1.0	-0.4	-2.2	-0.4	-2.1	0.0	-1.0	0.6	3.1	-0.4	-2.1	0.0
				Earthquake Y Mode 7	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0
				Earthquake Y Mode 8	0.2	0.2	0.4	0.1	0.1	-0.0	0.2	0.0	0.2	0.1	0.1	-0.0
				Earthquake Y Mode 9	-0.2	0.1	-0.1	0.0	-0.0	-0.0	-0.2	0.0	-0.0	0.0	-0.0	-0.0
	Floor 1	50x50	0.00/2.50	Self weight	712.2	0.4	-6.4	0.6	-6.9	0.0	696.9	-1.1	10.8	0.6	-6.9	0.0
				Dead load	183.2	-0.1	-0.8	-0.0	-0.7	0.0	183.2	0.0	1.0	-0.0	-0.7	0.0
				Live load	297.1	0.2	-3.5	0.3	-3.7	0.0	297.1	-0.6	5.8	0.3	-3.7	0.0
				Wind +X ecc.+	5.7	-3.5	0.1	-2.4	0.0	0.0	5.7	2.5	-0.0	-2.4	0.0	0.0
				Wind +X ecc.-	4.9	-3.0	-0.9	-2.1	-0.6	-0.0	4.9	2.2	0.5	-2.1	-0.6	-0.0
				Wind -X ecc.+	-5.7	3.5	-0.1	2.4	-0.0	-0.0	-5.7	-2.5	0.0	2.4	-0.0	-0.0
				Wind -X ecc.-	-4.9	3.0	0.9	2.1	0.6	0.0	-4.9	-2.2	-0.5	2.1	0.6	0.0
				Wind +Y ecc.+	-3.8	0.9	-9.0	0.7	-5.7	-0.0	-3.8	-0.7	5.1	0.7	-5.7	-0.0
				Wind +Y ecc.-	0.2	-1.0	-4.4	-0.7	-2.8	0.0	0.2	0.7	2.5	-0.7	-2.8	0.0
				Wind -Y ecc.+	3.8	-0.9	9.0	-0.7	5.7	0.0	3.8	0.7	-5.1	-0.7	5.7	0.0
				Wind -Y ecc.-	-0.2	1.0	4.4	0.7	2.8	-0.0	-0.2	-0.7	-2.5	0.7	2.8	-0.0
				Earthquake X Mode 1	-1.0	-1.8	-20.6	-1.1	-12.7	-0.1	-1.0	1.0	11.1	-1.1	-12.7	-0.1
				Earthquake X Mode 2	-82.0	39.1	-20.0	26.7	-12.4	-0.1	-82.0	-27.6	11.0	26.7	-12.4	-0.1
				Earthquake X Mode 3	2.5	-1.8	-3.5	-1.3	-2.2	0.0	2.5	1.3	1.9	-1.3	-2.2	0.0
				Earthquake X Mode 4	-0.5	-0.1	-2.4	-0.1	-1.6	-0.0	-0.5	0.1	1.5	-0.1	-1.6	-0.0
				Earthquake X Mode 5	1.6	5.4	-2.4	3.9	-1.6	-0.0	1.6	-4.2	1.6	3.9	-1.6	-0.0
Earthquake X Mode 6				-0.2	-0.1	-0.5	-0.1	-0.3	0.0	-0.2	0.1	0.3	-0.1	-0.3	0.0	
Earthquake X Mode 7				0.1	0.0	-0.5	0.0	-0.4	-0.0	0.1	-0.0	0.4	0.0	-0.4	-0.0	
Earthquake X Mode 8				0.1	-0.2	-0.6	-0.2	-0.4	0.0	0.1	0.2	0.5	-0.2	-0.4	0.0	
Earthquake X Mode 9				0.2	-1.6	0.9	-1.2	0.7	0.0	0.2	1.4	-0.8	-1.2	0.7	0.0	
Earthquake Y Mode 1				-0.5	-0.8	-9.3	-0.5	-5.7	-0.0	-0.5	0.5	5.0	-0.5	-5.7	-0.0	
Earthquake Y Mode 2				-25.3	12.1	-6.2	8.2	-3.8	-0.0	-25.3	-8.5	3.4	8.2	-3.8	-0.0	
Earthquake Y Mode 3				15.5	-11.4	-21.5	-7.8	-13.3	0.1	15.5	8.1	11.8	-7.8	-13.3	0.1	
Earthquake Y Mode 4				-0.1	-0.0	-0.5	-0.0	-0.3	-0.0	-0.1	0.0	0.3	-0.0	-0.3	-0.0	
Earthquake Y Mode 5				0.3	1.0	-0.4	0.7	-0.3	-0.0	0.3	-0.8	0.3	0.7	-0.3	-0.0	
Earthquake Y Mode 6				-1.3	-0.9	-4.2	-0.7	-2.8	0.0	-1.3	0.7	2.8	-0.7	-2.8	0.0	
Earthquake Y Mode 7	0.0	0.0	-0.2	0.0	-0.1	-0.0	0.0	-0.0	0.1	0.0	-0.1	-0.0				
Earthquake Y Mode 8	0.3	-0.6	-1.4	-0.4	-1.0	0.0	0.3	0.5	1.2	-0.4	-1.0	0.0				
Earthquake Y Mode 9	0.1	-0.6	0.3	-0.4	0.2	0.0	0.1	0.5	-0.3	-0.4	0.2	0.0				
C24	techo	50x50	12.00/14.50	Self weight	53.2	-3.1	-0.0	-2.0	0.2	0.0	37.9	1.9	-0.6	-2.0	0.2	0.0
				Dead load	7.9	-1.2	0.4	-1.0	1.6	-0.0	7.9	1.1	-3.6	-1.0	1.6	-0.0
				Live load	6.9	-1.7	1.2	-1.0	0.8	0.0	6.9	0.9	-0.8	-1.0	0.8	0.0
				Wind +X ecc.+	0.4	-0.3	-0.3	-0.2	-0.2	0.0	0.4	0.2	0.2	-0.2	-0.2	0.0
				Wind +X ecc.-	0.4	-0.3	-0.7	-0.2	-0.5	-0.0	0.4	0.2	0.5	-0.2	-0.5	-0.0
				Wind -X ecc.+	-0.4	0.3	0.3	0.2	0.2	-0.0	-0.4	-0.2	-0.2	0.2	0.2	-0.0
				Wind -X ecc.-	-0.4	0.3	0.7	0.2	0.5	0.0	-0.4	-0.2	-0.5	0.2	0.5	0.0
				Wind +Y ecc.+	0.2	-0.3	-2.9	-0.2	-2.1	-0.0	0.2	0.2	2.4	-0.2	-2.1	-0.0
				Wind +Y ecc.-	-0.0	-0.1	-1.1	-0.1	-0.8	0.0	-0.0	0.1	0.9	-0.1	-0.8	0.0
				Wind -Y ecc.+	-0.2	0.3	2.9	0.2	2.1	0.0	-0.2	-0.2	-2.4	0.2	2.1	0.0
				Wind -Y ecc.-	0.0	0.1	1.1	0.1	0.8	-0.0	0.0	-0.1	-0.9	0.1	0.8	-0.0
				Earthquake X Mode 1	2.0	-2.0	-12.2	-1.3	-8.8	-0.1	2.0	1.2	9.9	-1.3	-8.8	-0.1
				Earthquake X Mode 2	-9.6	5.9	-6.5	4.0	-5.0	-0.1	-9.6	-4.2	6.0	4.0	-5.0	-0.1
				Earthquake X Mode 3	0.4	-0.4	-1.1	-0.3	-0.8	0.0	0.4	0.3	0.9	-0.3	-0.8	0.0
				Earthquake X Mode 4	-0.1	0.3	3.1	0.2	2.0	0.0	-0.1	-0.2	-2.0	0.2	2.0	0.0
				Earthquake X Mode 5	8.8	-4.9	2.1	-3.1	1.3	0.0	8.8	2.7	-1.3	-3.1	1.3	0.0
				Earthquake X Mode 6	-0.1	0.1	0.4	0.1	0.2	-0.0	-0.1	-0.1	-0.2	0.1	0.2	-0.0
				Earthquake X Mode 7	-0.1	0.0	-1.0	0.0	-0.6	-0.0	-0.1	-0.0	0.4	0.0	-0.6	-0.0
				Earthquake X Mode 8	0.4	-0.3	-0.6	-0.2	-0.3	-0.0	0.4	0.1	0.3	-0.2	-0.3	-0.0
				Earthquake X Mode 9	3.3	-1.9	1.1	-1.1	0.6	0.0	3.3	0.9	-0.4	-1.1	0.6	0.0
				Earthquake Y Mode 1	0.9	-0.9	-5.5	-0.6	-4.0	-0.0	0.9	0.6	4.5	-0.6	-4.0	-0.0
				Earthquake Y Mode 2	-3.0	1.8	-2.0	1.2	-1.5	-0.0	-3.0	-1.3	1.8	1.2	-1.5	-0.0
				Earthquake Y Mode 3	2.7	-2.6	-6.7	-1.7	-4.8	0.0	2.7	1.7	5.4	-1.7	-4.8	0.0
				Earthquake Y Mode 4	-0.0	0.1	0.6	0.0	0.4	0.0	-0.0	-0.0	-0.4	0.0	0.4	0.0
Earthquake Y Mode 5	1.6	-0.9	0.4	-0.6	0.2	0.0	1.6	0.5	-0.2	-0.6	0.2	0.0				
Earthquake Y Mode 6	-1.0	0.9	3.0	0.6	2.0	-0.0	-1.0	-0.5	-1.9	0.6	2.0	-0.0				
Earthquake Y Mode 7	-0.0	0.0	-0.3	0.0	-0.2	-0.0	-0.0	-0.0	0.1	0.0	-0.2	-0.0				
Earthquake Y Mode 8	1.0	-0.7	-1.5	-0.4	-0.9	-0.0	1.0	0.4	0.7	-0.4	-0.9	-0.0				
Earthquake Y Mode 9	1.2	-0.7	0.4	-0.4	0.2	0.0	1.2	0.3	-0.2	-0.4	0.2	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 4	50x50	9.00/11.50	Self weight	112.6	-2.9	-0.8	-2.3	-0.8	0.0	97.3	2.9	1.2	-2.3	-0.8	0.0				
				Dead load	30.9	-0.7	-3.1	-0.6	-2.8	-0.0	30.9	0.8	3.9	-0.6	-2.8	-0.0				
				Live load	24.6	-2.1	0.8	-1.7	0.6	0.0	24.6	2.2	-0.7	-1.7	0.6	0.0				
				Wind +X ecc.+	3.2	-1.4	-0.3	-1.2	-0.2	0.0	3.2	1.6	0.3	-1.2	-0.2	0.0				
				Wind +X ecc.-	2.9	-1.3	-1.0	-1.1	-0.9	-0.0	2.9	1.5	1.2	-1.1	-0.9	-0.0				
				Wind -X ecc.+	-3.2	1.4	0.3	1.2	0.2	-0.0	-3.2	-1.6	-0.3	1.2	0.2	-0.0				
				Wind -X ecc.-	-2.9	1.3	1.0	1.1	0.9	0.0	-2.9	-1.5	-1.2	1.1	0.9	0.0				
				Wind +Y ecc.+	-1.3	-0.0	-4.9	-0.0	-4.4	-0.0	-1.3	-0.0	6.2	-0.0	-4.4	-0.0				
				Wind +Y ecc.-	0.0	-0.3	-1.7	-0.3	-1.5	0.0	0.0	0.4	2.0	-0.3	-1.5	0.0				
				Wind -Y ecc.+	1.3	0.0	4.9	0.0	4.4	0.0	1.3	0.0	-6.2	0.0	4.4	0.0				
				Wind -Y ecc.-	-0.0	0.3	1.7	0.3	1.5	-0.0	-0.0	-0.4	-2.0	0.3	1.5	-0.0				
				Earthquake X Mode 1	3.0	-3.1	-20.0	-2.5	-17.6	-0.1	3.0	3.3	24.1	-2.5	-17.6	-0.1				
				Earthquake X Mode 2	-60.7	21.0	-12.7	17.5	-11.5	-0.1	-60.7	-22.8	16.1	17.5	-11.5	-0.1				
				Earthquake X Mode 3	2.1	-1.0	-1.8	-0.9	-1.6	0.0	2.1	1.1	2.1	-0.9	-1.6	0.0				
				Earthquake X Mode 4	0.1	0.3	3.7	0.3	2.5	0.0	0.1	-0.3	-2.6	0.3	2.5	0.0				
				Earthquake X Mode 5	24.3	-5.3	2.6	-3.9	1.7	0.0	24.3	4.4	-1.6	-3.9	1.7	0.0				
				Earthquake X Mode 6	-0.3	0.1	0.4	0.1	0.3	-0.0	-0.3	-0.1	-0.3	0.1	0.3	-0.0				
				Earthquake X Mode 7	-0.2	-0.0	-0.1	-0.0	0.1	0.0	-0.2	0.0	-0.4	-0.0	0.1	0.0				
				Earthquake X Mode 8	0.6	0.0	-0.1	0.0	0.1	0.0	0.6	-0.1	-0.2	0.0	0.1	0.0				
				Earthquake X Mode 9	5.0	0.2	0.1	0.3	-0.2	-0.0	5.0	-0.6	0.6	0.3	-0.2	-0.0				
				Earthquake Y Mode 1	1.4	-1.4	-9.1	-1.2	-8.0	-0.1	1.4	1.5	10.9	-1.2	-8.0	-0.1				
				Earthquake Y Mode 2	-18.8	6.5	-3.9	5.4	-3.6	-0.0	-18.8	-7.0	5.0	5.4	-3.6	-0.0				
				Earthquake Y Mode 3	13.2	-6.5	-11.0	-5.4	-9.6	0.1	13.2	7.0	13.0	-5.4	-9.6	0.1				
				Earthquake Y Mode 4	0.0	0.1	0.7	0.0	0.5	0.0	0.0	-0.1	-0.5	0.0	0.5	0.0				
				Earthquake Y Mode 5	4.4	-1.0	0.5	-0.7	0.3	0.0	4.4	0.8	-0.3	-0.7	0.3	0.0				
				Earthquake Y Mode 6	-2.6	1.0	3.6	0.8	2.5	-0.0	-2.6	-0.9	-2.5	0.8	2.5	-0.0				
				Earthquake Y Mode 7	-0.1	-0.0	-0.0	-0.0	0.0	0.0	-0.1	0.0	-0.1	-0.0	0.0	0.0				
				Earthquake Y Mode 8	1.5	0.0	-0.2	0.1	0.2	0.0	1.5	-0.2	-0.6	0.1	0.2	0.0				
				Earthquake Y Mode 9	1.8	0.1	0.1	0.1	-0.1	-0.0	1.8	-0.2	0.2	0.1	-0.1	-0.0				
					Floor 3	50x50	6.00/8.50	Self weight	170.7	-2.5	-1.0	-2.1	-0.8	0.0	155.4	2.6	1.2	-2.1	-0.8	0.0
								Dead load	53.0	-0.4	-2.0	-0.4	-1.4	-0.0	53.0	0.6	1.6	-0.4	-1.4	-0.0
								Live load	42.0	-1.8	0.6	-1.5	0.4	0.0	42.0	1.9	-0.5	-1.5	0.4	0.0
								Wind +X ecc.+	9.3	-2.5	-0.3	-2.0	-0.3	0.0	9.3	2.6	0.3	-2.0	-0.3	0.0
								Wind +X ecc.-	8.2	-2.3	-1.3	-1.9	-1.1	-0.0	8.2	2.4	1.5	-1.9	-1.1	-0.0
								Wind -X ecc.+	-9.3	2.5	0.3	2.0	0.3	-0.0	-9.3	-2.6	-0.3	2.0	0.3	-0.0
								Wind -X ecc.-	-8.2	2.3	1.3	1.9	1.1	0.0	-8.2	-2.4	-1.5	1.9	1.1	0.0
Wind +Y ecc.+	-4.6	0.4	-6.7					0.3	-5.7	-0.0	-4.6	-0.3	7.5	0.3	-5.7	-0.0				
Wind +Y ecc.-	0.5	-0.6	-2.1					-0.5	-1.8	0.0	0.5	0.6	2.3	-0.5	-1.8	0.0				
Wind -Y ecc.+	4.6	-0.4	6.7					-0.3	5.7	0.0	4.6	0.3	-7.5	-0.3	5.7	0.0				
Wind -Y ecc.-	-0.5	0.6	2.1					0.5	1.8	-0.0	-0.5	-0.6	-2.3	0.5	1.8	-0.0				
Earthquake X Mode 1	3.6	-3.7	-25.7					-3.0	-21.3	-0.2	3.6	3.7	27.4	-3.0	-21.3	-0.2				
Earthquake X Mode 2	-152.5	33.9	-17.1					26.9	-14.1	-0.1	-152.5	-33.3	18.1	26.9	-14.1	-0.1				
Earthquake X Mode 3	5.2	-1.6	-2.2					-1.3	-1.8	0.0	5.2	1.6	2.3	-1.3	-1.8	0.0				
Earthquake X Mode 4	0.1	0.1	1.6					0.1	0.6	0.0	0.1	-0.1	0.2	0.1	0.6	0.0				
Earthquake X Mode 5	30.6	-0.8	1.1					-0.1	0.2	0.0	30.6	-0.7	0.6	-0.1	0.2	0.0				
Earthquake X Mode 6	-0.4	0.0	0.2					0.0	0.1	-0.0	-0.4	-0.0	0.0	0.0	0.1	-0.0				
Earthquake X Mode 7	0.0	-0.0	0.9					-0.0	0.7	0.0	0.0	0.0	-0.9	-0.0	0.7	0.0				
Earthquake X Mode 8	0.1	0.3	0.6					0.2	0.4	0.0	0.1	-0.3	-0.5	0.2	0.4	0.0				
Earthquake X Mode 9	0.6	2.1	-1.1					1.6	-0.8	-0.0	0.6	-2.0	1.0	1.6	-0.8	-0.0				
Earthquake Y Mode 1	1.7	-1.7	-11.7					-1.3	-9.6	-0.1	1.7	1.7	12.4	-1.3	-9.6	-0.1				
Earthquake Y Mode 2	-47.1	10.5	-5.3					8.3	-4.4	-0.0	-47.1	-10.3	5.6	8.3	-4.4	-0.0				
Earthquake Y Mode 3	32.0	-9.6	-13.5					-7.7	-11.0	0.1	32.0	9.7	13.9	-7.7	-11.0	0.1				
Earthquake Y Mode 4	0.0	0.0	0.3					0.0	0.1	0.0	0.0	-0.0	0.0	0.0	0.1	0.0				
Earthquake Y Mode 5	5.6	-0.1	0.2					-0.0	0.0	0.0	5.6	-0.1	0.1	-0.0	0.0	0.0				
Earthquake Y Mode 6	-3.5	0.3	1.5					0.2	0.5	-0.0	-3.5	-0.1	0.3	0.2	0.5	-0.0				
Earthquake Y Mode 7	0.0	-0.0	0.3					-0.0	0.2	0.0	0.0	0.0	-0.3	-0.0	0.2	0.0				
Earthquake Y Mode 8	0.4	0.8	1.4					0.6	1.1	0.0	0.4	-0.8	-1.3	0.6	1.1	0.0				
Earthquake Y Mode 9	0.2	0.8	-0.4					0.6	-0.3	-0.0	0.2	-0.7	0.4	0.6	-0.3	-0.0				
	Floor 2	50x50	3.00/5.50					Self weight	227.4	-2.3	-1.5	-1.8	-1.3	0.0	212.0	2.3	1.7	-1.8	-1.3	0.0
								Dead load	74.1	-0.1	-2.3	-0.1	-1.8	0.0	74.1	0.2	2.2	-0.1	-1.8	0.0
								Live load	58.5	-1.6	0.4	-1.3	0.2	0.0	58.5	1.7	-0.2	-1.3	0.2	0.0
								Wind +X ecc.+	18.4	-3.7	-0.3	-2.8	-0.3	0.0	18.4	3.3	0.3	-2.8	-0.3	0.0
								Wind +X ecc.-	15.9	-3.3	-1.6	-2.5	-1.3	-0.0	15.9	3.0	1.5	-2.5	-1.3	-0.0
								Wind -X ecc.+	-18.4	3.7	0.3	2.8	0.3	-0.0	-18.4	-3.3	-0.3	2.8	0.3	-0.0
								Wind -X ecc.-	-15.9	3.3	1.6	2.5	1.3	0.0	-15.9	-3.0	-1.5	2.5	1.3	0.0
				Wind +Y ecc.+	-9.5	0.8	-8.6	0.5	-6.5	-0.0	-9.5	-0.6	7.8	0.5	-6.5	-0.0				
				Wind +Y ecc.-	1.7	-0.9	-2.6	-0.7	-1.9	0.0	1.7	0.9	2.2	-0.7	-1.9	0.0				
				Wind -Y ecc.+	9.5	-0.8	8.6	-0.5	6.5	0.0	9.5	0.6	-7.8	-0.5	6.5	0.0				
				Wind -Y ecc.-	-1.7	0.9	2.6	0.7	1.9	-0.0	-1.7	-0.9	-2.2	0.7	1.9	-0.0				
				Earthquake X Mode 1	3.6	-3.7	-29.9	-2.9	-22.5	-0.2	3.6	3.5	26.2	-2.9	-22.5	-0.2				
				Earthquake X Mode 2	-272.8	44.1	-20.9	32.9	-15.2	-0.1	-272.8	-38.3	17.2	32.9	-15.2	-0.1				
				Earthquake X Mode 3	9.4	-2.0	-2.4	-1.5	-1.8	0.0	9.4	1.8	2.0	-1.5	-1.8	0.0				
				Earthquake X Mode 4	-0.1	-0.1	-1.6	-0.1	-1.6	-0.0	-0.1	0.1	2.5	-0.1	-1.6	-0.0				
				Earthquake X Mode 5	21.4	4.8	-1.3	4.1	-1.4	-0.0	21.4	-5.5	2.2	4.1	-1.4	-0.0				
				Earthquake X Mode 6	-0.3	-0.1	-0.2	-0.1	-0.2	0.0	-0.3	0.1	0.3	-0.1	-0.2	0.0				
				Earthquake X Mode 7	0.2	-0.0	0.3	-0.0	0.1	0.0	0.2	0.0	0.2	-0.0	0.1	0.0				
				Earthquake X Mode 8	-0.2	0.1	0.2	0.0	0.0	-0.0	-0.2	-0.0	0.1	0.0	0.0	-0.0				
				Earthquake X Mode 9	-2.3	0.3	-0.4	0.1	-0.0	-0.0	-2.3	0.0	-0.3	0.1	-0.0	-0.0				
				Earthquake Y Mode 1	1.7	-1.7	-13.6	-1.3	-10.2	-0.1	1.7	1.6	11.9	-1.3	-10.2	-0.1				
				Earthquake Y Mode 2	-84.3	13.6	-6.5	10.2	-4.7	-0.0	-84.3	-11.8	5.3	10.2	-4.7	-0.0				
				Earthquake Y Mode 3	57.9	-12.5	-14.9	-9.5	-10.9	0.1	57.9	11.3	12.4	-9.5	-10.9	0.1				
				Earthquake Y Mode 4	-0.0	-0.0	-0.3	-0.0	-0.3	-0.0	-0.0	0.0	0.5	-0.0	-0.3	-0.0				
				Earthquake Y Mode 5	3.9	0.9	-0.2	0.7	-0.3	-0.0	3.9	-1.0	0.4	0.7	-0.3	-0.0				
				Earthquake Y Mode 6	-2.9	-0.7	-1.6	-0.6	-1.7	0.0	-2.9	0.8	2.5	-0.6	-1.7	0.0				
				Earthquake Y Mode 7	0.1	-0.0	0.1	-0.0	0.0	0.0	0.1	0.0	0.0	-0.0	0.0	0.0				
				Earthquake Y Mode 8	-0.5	0.1	0.4	0.1	0.1	-0.0	-0.5	-0.0	0.3	0.1	0.1	-0.0				
				Earthquake Y Mode 9	-0.8	0.1	-0.1	0.0	-0.0	-0.0	-0.8	0.0	-0.1	0.0	-0.0	-0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 1	50x50	0.00/2.50	Self weight	281.9	-1.1	-0.9	-1.0	-1.0	0.0	266.6	1.4	1.5	-1.0	-1.0	0.0				
				Dead load	94.2	-0.0	-1.1	0.0	-1.1	0.0	94.2	-0.0	1.6	0.0	-1.1	0.0				
				Live load	73.6	-0.7	0.1	-0.7	0.1	0.0	73.6	1.1	-0.1	-0.7	0.1	0.0				
				Wind +X ecc.+	27.8	-3.4	-0.1	-2.3	-0.1	0.0	27.8	2.4	0.2	-2.3	-0.1	0.0				
				Wind +X ecc.-	23.9	-3.0	-1.6	-2.1	-1.0	-0.0	23.9	2.1	0.9	-2.1	-1.0	-0.0				
				Wind -X ecc.+	-27.8	3.4	0.1	2.3	0.1	-0.0	-27.8	-2.4	-0.2	2.3	0.1	-0.0				
				Wind -X ecc.-	-23.9	3.0	1.6	2.1	1.0	0.0	-23.9	-2.1	-0.9	2.1	1.0	0.0				
				Wind +Y ecc.+	-14.4	0.7	-9.6	0.4	-5.5	-0.0	-14.4	-0.4	4.3	0.4	-5.5	-0.0				
				Wind +Y ecc.-	3.6	-1.1	-2.4	-0.8	-1.4	0.0	3.6	0.9	1.0	-0.8	-1.4	0.0				
				Wind -Y ecc.+	14.4	-0.7	9.6	-0.4	5.5	0.0	14.4	0.4	-4.3	-0.4	5.5	0.0				
				Wind -Y ecc.-	-3.6	1.1	2.4	0.8	1.4	-0.0	-3.6	-0.9	-1.0	0.8	1.4	-0.0				
				Earthquake X Mode 1	2.5	-2.3	-29.9	-1.6	-17.3	-0.1	2.5	1.8	13.4	-1.6	-17.3	-0.1				
				Earthquake X Mode 2	-386.0	37.5	-23.2	24.9	-12.4	-0.1	-386.0	-24.8	7.7	24.9	-12.4	-0.1				
				Earthquake X Mode 3	13.8	-1.9	-2.0	-1.3	-1.1	0.0	13.8	1.3	0.8	-1.3	-1.1	0.0				
				Earthquake X Mode 4	-0.6	-0.1	-3.7	-0.1	-2.3	-0.0	-0.6	0.1	2.1	-0.1	-2.3	-0.0				
				Earthquake X Mode 5	4.4	6.0	-3.1	4.4	-1.9	-0.0	4.4	-5.1	1.6	4.4	-1.9	-0.0				
				Earthquake X Mode 6	-0.1	-0.1	-0.4	-0.1	-0.3	0.0	-0.1	0.1	0.2	-0.1	-0.3	0.0				
				Earthquake X Mode 7	0.1	0.0	-1.0	0.0	-0.7	-0.0	0.1	-0.0	0.7	0.0	-0.7	-0.0				
				Earthquake X Mode 8	0.1	-0.3	-0.5	-0.2	-0.4	0.0	0.1	0.2	0.4	-0.2	-0.4	0.0				
				Earthquake X Mode 9	0.7	-1.7	1.2	-1.3	0.8	0.0	0.7	1.6	-0.8	-1.3	0.8	0.0				
				Earthquake Y Mode 1	1.1	-1.0	-13.6	-0.7	-7.9	-0.0	1.1	0.8	6.1	-0.7	-7.9	-0.0				
				Earthquake Y Mode 2	-119.2	11.6	-7.2	7.7	-3.8	-0.0	-119.2	-7.7	2.4	7.7	-3.8	-0.0				
				Earthquake Y Mode 3	85.2	-11.5	-12.2	-7.9	-6.9	0.1	85.2	8.3	5.0	-7.9	-6.9	0.1				
				Earthquake Y Mode 4	-0.1	-0.0	-0.7	-0.0	-0.4	-0.0	-0.1	0.0	0.4	-0.0	-0.4	-0.0				
				Earthquake Y Mode 5	0.8	1.1	-0.6	0.8	-0.3	-0.0	0.8	-0.9	0.3	0.8	-0.3	-0.0				
				Earthquake Y Mode 6	-1.2	-1.1	-3.4	-0.8	-2.1	0.0	-1.2	0.9	1.9	-0.8	-2.1	0.0				
				Earthquake Y Mode 7	0.0	0.0	-0.3	0.0	-0.2	-0.0	0.0	-0.0	0.2	0.0	-0.2	-0.0				
				Earthquake Y Mode 8	0.3	-0.6	-1.4	-0.5	-1.0	0.0	0.3	0.6	1.0	-0.5	-1.0	0.0				
				Earthquake Y Mode 9	0.2	-0.6	0.4	-0.5	0.3	0.0	0.2	0.6	-0.3	-0.5	0.3	0.0				
				C25	techo	50x50	12.00/14.40	Self weight	71.3	36.4	-11.9	27.6	-8.1	0.0	56.6	-29.9	7.5	27.6	-8.1	0.0
								Dead load	34.9	23.3	-4.3	19.5	-3.4	-0.0	34.9	-23.5	3.9	19.5	-3.4	-0.0
								Live load	10.4	13.0	-3.7	8.3	-2.3	0.0	10.4	-7.0	1.8	8.3	-2.3	0.0
								Wind +X ecc.+	-0.1	-0.2	-0.0	-0.3	-0.0	0.0	-0.1	0.4	0.0	-0.3	-0.0	0.0
Wind +X ecc.-	-0.2	-0.2	0.3					-0.2	0.3	-0.0	-0.2	0.3	-0.3	-0.2	0.3	-0.0				
Wind -X ecc.+	0.1	0.2	0.0					0.3	0.0	-0.0	0.1	-0.4	-0.0	0.3	0.0	-0.0				
Wind -X ecc.-	0.2	0.2	-0.3					0.2	-0.3	0.0	0.2	-0.3	0.3	0.2	-0.3	0.0				
Wind +Y ecc.+	0.1	0.2	0.0					0.2	-0.0	-0.0	0.1	-0.3	0.1	0.2	-0.0	-0.0				
Wind +Y ecc.-	0.7	0.0	-1.6					-0.0	-1.2	0.0	0.7	0.1	1.4	-0.0	-1.2	0.0				
Wind -Y ecc.+	-0.1	-0.2	-0.0					-0.2	0.0	0.0	-0.1	0.3	-0.1	-0.2	0.0	0.0				
Wind -Y ecc.-	-0.7	-0.0	1.6					0.0	1.2	-0.0	-0.7	-0.1	-1.4	0.0	1.2	-0.0				
Earthquake X Mode 1	-3.3	0.4	8.2					0.5	6.1	-0.1	-3.3	-0.8	-6.5	0.5	6.1	-0.1				
Earthquake X Mode 2	0.2	4.7	4.6					5.0	3.3	-0.1	0.2	-7.3	-3.3	5.0	3.3	-0.1				
Earthquake X Mode 3	0.9	-0.2	-2.2					-0.2	-1.7	0.0	0.9	0.3	1.8	-0.2	-1.7	0.0				
Earthquake X Mode 4	1.0	-0.2	-2.9					-0.1	-2.0	0.0	1.0	0.2	1.8	-0.1	-2.0	0.0				
Earthquake X Mode 5	0.2	-2.2	-1.8					-1.6	-1.2	0.0	0.2	1.6	1.1	-1.6	-1.2	0.0				
Earthquake X Mode 6	-0.2	0.0	0.5					0.0	0.3	-0.0	-0.2	-0.0	-0.3	0.0	0.3	-0.0				
Earthquake X Mode 7	-0.3	0.2	1.4					0.1	0.8	-0.0	-0.3	-0.0	-0.6	0.1	0.8	-0.0				
Earthquake X Mode 8	0.1	-0.1	-0.5					-0.1	-0.3	-0.0	0.1	0.0	0.2	-0.1	-0.3	-0.0				
Earthquake X Mode 9	-0.0	-1.2	-0.5					-0.7	-0.3	0.0	-0.0	0.3	0.2	-0.7	-0.3	0.0				
Earthquake Y Mode 1	-1.5	0.2	3.7					0.2	2.8	-0.0	-1.5	-0.3	-2.9	0.2	2.8	-0.0				
Earthquake Y Mode 2	0.1	1.5	1.4					1.5	1.0	-0.0	0.1	-2.3	-1.0	1.5	1.0	-0.0				
Earthquake Y Mode 3	5.3	-1.0	-13.5					-1.3	-10.3	0.0	5.3	2.1	11.1	-1.3	-10.3	0.0				
Earthquake Y Mode 4	0.2	-0.0	-0.6					-0.0	-0.4	0.0	0.2	0.0	0.3	-0.0	-0.4	0.0				
Earthquake Y Mode 5	0.0	-0.4	-0.3					-0.3	-0.2	0.0	0.0	0.3	0.2	-0.3	-0.2	0.0				
Earthquake Y Mode 6	-1.3	0.2	3.8					0.2	2.6	-0.0	-1.3	-0.2	-2.4	0.2	2.6	-0.0				
Earthquake Y Mode 7	-0.1	0.1	0.4					0.0	0.2	-0.0	-0.1	-0.0	-0.2	0.0	0.2	-0.0				
Earthquake Y Mode 8	0.3	-0.4	-1.3					-0.2	-0.8	-0.0	0.3	0.1	0.6	-0.2	-0.8	-0.0				
Earthquake Y Mode 9	-0.0	-0.5	-0.2					-0.2	-0.1	0.0	-0.0	0.1	0.1	-0.2	-0.1	0.0				
Floor 4	50x50	9.00/11.40	Self weight		152.0	26.3	-9.6	20.8	-8.0	0.0	137.2	-23.7	9.5	20.8	-8.0	0.0				
			Dead load		63.5	9.1	-3.2	6.1	-2.6	-0.0	63.5	-5.5	3.0	6.1	-2.6	-0.0				
			Live load		38.3	15.2	-4.8	12.8	-4.0	0.0	38.3	-15.7	5.0	12.8	-4.0	0.0				
			Wind +X ecc.+		-0.3	-0.3	-0.0	-0.5	-0.0	0.0	-0.3	0.8	0.0	-0.5	-0.0	0.0				
			Wind +X ecc.-		-1.0	-0.3	0.6	-0.4	0.6	-0.0	-1.0	0.7	-0.8	-0.4	0.6	-0.0				
			Wind -X ecc.+		0.3	0.3	0.0	0.5	0.0	-0.0	0.3	-0.8	-0.0	0.5	0.0	-0.0				
			Wind -X ecc.-		1.0	0.3	-0.6	0.4	-0.6	0.0	1.0	-0.7	0.8	0.4	-0.6	0.0				
			Wind +Y ecc.+		0.7	0.3	-0.4	0.4	-0.5	-0.0	0.7	-0.6	0.7	0.4	-0.5	-0.0				
			Wind +Y ecc.-		3.8	0.1	-3.4	-0.0	-3.4	0.0	3.8	0.2	4.7	-0.0	-3.4	0.0				
			Wind -Y ecc.+		-0.7	-0.3	0.4	-0.4	0.5	0.0	-0.7	0.6	-0.7	-0.4	0.5	0.0				
			Wind -Y ecc.-		-3.8	-0.1	3.4	0.0	3.4	-0.0	-3.8	-0.2	-4.7	0.0	3.4	-0.0				
			Earthquake X Mode 1		-15.6	0.3	14.1	0.5	13.1	-0.1	-15.6	-0.9	-17.4	0.5	13.1	-0.1				
			Earthquake X Mode 2		-1.5	7.2	7.0	8.3	6.3	-0.1	-1.5	-12.7	-8.1	8.3	6.3	-0.1				
			Earthquake X Mode 3		4.3	-0.2	-4.0	-0.3	-3.8	0.0	4.3	0.5	5.0	-0.3	-3.8	0.0				
			Earthquake X Mode 4		3.6	-0.3	-3.6	-0.1	-2.6	0.0	3.6	0.0	2.6	-0.1	-2.6	0.0				
			Earthquake X Mode 5		0.9	-2.9	-2.0	-1.5	-1.4	0.0	0.9	0.8	1.4	-1.5	-1.4	0.0				
			Earthquake X Mode 6		-0.6	0.0	0.6	0.0	0.5	-0.0	-0.6	-0.0	-0.5	0.0	0.5	-0.0				
			Earthquake X Mode 7		-0.6	0.1	0.3	-0.0	-0.1	0.0	-0.6	0.1	0.5	-0.0	-0.1	0.0				
			Earthquake X Mode 8		0.3	-0.1	-0.2	0.0	0.0	0.0	0.3	-0.1	-0.2	0.0	0.0	0.0				
			Earthquake X Mode 9		-0.0	-0.4	0.0	0.2	0.1	-0.0	-0.0	-0.8	-0.2	0.2	0.1	-0.0				
			Earthquake Y Mode 1		-7.1	0.2	6.4	0.2	6.0	-0.1	-7.1	-0.4	-7.9	0.2	6.0	-0.1				
			Earthquake Y Mode 2		-0.5	2.2	2.2	2.6	1.9	-0.0	-0.5	-3.9	-2.5	2.6	1.9	-0.0				
			Earthquake Y Mode 3		26.4	-1.1	-24.8	-1.7	-23.3	0.1	26.4	3.0	31.0	-1.7	-23.3	0.1				
			Earthquake Y Mode 4		0.7	-0.1	-0.7	-0.0	-0.5	0.0	0.7	0.0	0.5	-0.0	-0.5	0.0				
Earthquake Y Mode 5	0.2	-0.5	-0.4	-0.3	-0.3	0.0	0.2	0.1	0.2	-0.3	-0.3	0.0								
Earthquake Y Mode 6	-5.0	0.4	5.2	0.2	3.8	-0.0	-5.0	-0.1	-3.9	0.2	3.8	-0.0								
Earthquake Y Mode 7	-0.2	0.0	0.1	-0.0	-0.0	0.0	-0.2	0.0	0.1	-0.0	-0.0	0.0								
Earthquake Y Mode 8	0.6	-0.2	-0.4	0.0	0.0	0.0	0.6	-0.2	-0.4	0.0	0.0	0.0								
Earthquake Y Mode 9	-0.0	-0.2	0.0	0.1	0.0	-0.0	-0.0	-0.3	-0.1	0.1	0.0	-0.0								



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.40	Self weight	231.4	27.5	-9.5	23.5	-8.1	0.0	0.0	216.7	-29.0	9.9	23.5	-8.1	0.0
				Dead load	91.2	12.0	-3.3	10.5	-2.8	-0.0	91.2	-13.2	3.4	10.5	-2.8	-0.0
				Live load	66.2	13.9	-4.3	11.7	-3.6	0.0	66.2	-14.2	4.4	11.7	-3.6	0.0
				Wind +X ecc.+	-0.7	-0.7	-0.0	-0.7	-0.0	0.0	-0.7	1.0	0.0	-0.7	-0.0	0.0
				Wind +X ecc.-	-2.1	-0.6	0.9	-0.6	0.8	-0.0	-2.1	0.8	-1.1	-0.6	0.8	-0.0
				Wind -X ecc.+	0.7	0.7	0.0	0.7	0.0	-0.0	0.7	-1.0	-0.0	0.7	0.0	-0.0
				Wind -X ecc.-	2.1	0.6	-0.9	0.6	-0.8	0.0	2.1	-0.8	1.1	0.6	-0.8	0.0
				Wind +Y ecc.+	1.7	0.5	-0.8	0.5	-0.8	-0.0	1.7	-0.7	1.1	0.5	-0.8	-0.0
				Wind +Y ecc.-	8.5	-0.0	-5.2	-0.1	-4.8	0.0	8.5	0.3	6.3	-0.1	-4.8	0.0
				Wind -Y ecc.+	-1.7	-0.5	0.8	-0.5	0.8	0.0	-1.7	0.7	-1.1	-0.5	0.8	0.0
				Wind -Y ecc.-	-8.5	0.0	5.2	0.1	4.8	-0.0	-8.5	-0.3	-6.3	0.1	4.8	-0.0
				Earthquake X Mode 1	-32.3	0.7	19.0	0.7	16.5	-0.2	-32.3	-1.0	-20.6	0.7	16.5	-0.2
				Earthquake X Mode 2	-3.7	11.8	8.7	10.7	7.4	-0.1	-3.7	-14.0	-9.0	10.7	7.4	-0.1
				Earthquake X Mode 3	9.0	-0.4	-5.5	-0.4	-4.8	0.0	9.0	0.6	6.1	-0.4	-4.8	0.0
				Earthquake X Mode 4	5.0	-0.2	-1.7	-0.0	-0.7	0.0	5.0	-0.1	-0.1	-0.0	-0.7	0.0
				Earthquake X Mode 5	1.3	-2.0	-0.8	-0.3	-0.3	0.0	1.3	-1.2	-0.2	-0.3	-0.3	0.0
				Earthquake X Mode 6	-0.9	0.0	0.3	0.0	0.1	-0.0	-0.9	0.0	-0.0	0.0	0.1	-0.0
				Earthquake X Mode 7	-0.1	-0.1	-1.3	-0.1	-1.0	0.0	-0.1	0.1	1.2	-0.1	-1.0	0.0
				Earthquake X Mode 8	0.0	0.1	0.5	0.1	0.4	0.0	0.0	-0.1	-0.5	0.1	0.4	0.0
				Earthquake X Mode 9	-0.1	1.0	0.4	0.7	0.3	-0.0	-0.1	-0.8	-0.3	0.7	0.3	-0.0
				Earthquake Y Mode 1	-14.6	0.3	8.6	0.3	7.5	-0.1	-14.6	-0.5	-9.4	0.3	7.5	-0.1
				Earthquake Y Mode 2	-1.1	3.6	2.7	3.3	2.3	-0.0	-1.1	-4.3	-2.8	3.3	2.3	-0.0
				Earthquake Y Mode 3	55.7	-2.3	-33.7	-2.4	-29.6	0.1	55.7	3.5	37.4	-2.4	-29.6	0.1
				Earthquake Y Mode 4	1.0	-0.0	-0.3	-0.0	-0.1	0.0	1.0	-0.0	-0.0	-0.0	-0.1	0.0
				Earthquake Y Mode 5	0.2	-0.4	-0.1	-0.1	-0.0	0.0	0.2	-0.2	-0.0	-0.1	-0.0	0.0
				Earthquake Y Mode 6	-7.3	0.4	2.7	0.1	1.2	-0.0	-7.3	0.2	-0.1	0.1	1.2	-0.0
				Earthquake Y Mode 7	-0.0	-0.0	-0.4	-0.0	-0.3	0.0	-0.0	0.0	0.4	-0.0	-0.3	0.0
				Earthquake Y Mode 8	0.1	0.3	1.3	0.2	1.1	0.0	0.1	-0.2	-1.3	0.2	1.1	0.0
				Earthquake Y Mode 9	-0.0	0.4	0.2	0.3	0.1	-0.0	-0.0	-0.3	-0.1	0.3	0.1	-0.0
Floor 2	50x50	3.00/5.40	Self weight	310.8	29.8	-10.3	23.8	-8.4	0.0	0.0	296.1	-27.4	9.9	23.8	-8.4	0.0
				Dead load	118.9	12.4	-3.5	9.8	-2.8	0.0	118.9	-11.1	3.3	9.8	-2.8	0.0
				Live load	94.0	15.7	-4.8	12.6	-3.9	0.0	94.0	-14.5	4.6	12.6	-3.9	0.0
				Wind +X ecc.+	-1.0	-1.1	-0.1	-0.8	-0.0	0.0	-1.0	0.9	0.1	-0.8	-0.0	0.0
				Wind +X ecc.-	-3.5	-0.9	1.2	-0.7	1.0	-0.0	-3.5	0.7	-1.2	-0.7	1.0	-0.0
				Wind -X ecc.+	1.0	1.1	0.1	0.8	0.0	-0.0	1.0	-0.9	-0.1	0.8	0.0	-0.0
				Wind -X ecc.-	3.5	0.9	-1.2	0.7	-1.0	0.0	3.5	-0.7	1.2	0.7	-1.0	0.0
				Wind +Y ecc.+	3.3	0.9	-1.3	0.6	-1.2	-0.0	3.3	-0.6	1.6	0.6	-1.2	-0.0
				Wind +Y ecc.-	14.7	-0.0	-7.3	-0.1	-6.1	0.0	14.7	0.3	7.5	-0.1	-6.1	0.0
				Wind -Y ecc.+	-3.3	-0.9	1.3	-0.6	1.2	0.0	-3.3	0.6	-1.6	-0.6	1.2	0.0
				Wind -Y ecc.-	-14.7	0.0	7.3	0.1	6.1	-0.0	-14.7	-0.3	-7.5	0.1	6.1	-0.0
				Earthquake X Mode 1	-51.2	1.0	22.8	0.7	18.1	-0.2	-51.2	-0.8	-20.7	0.7	18.1	-0.2
				Earthquake X Mode 2	-6.0	16.6	10.0	11.6	7.7	-0.1	-6.0	-11.1	-8.6	11.6	7.7	-0.1
				Earthquake X Mode 3	14.6	-0.5	-6.7	-0.4	-5.5	0.0	14.6	0.5	6.4	-0.4	-5.5	0.0
				Earthquake X Mode 4	4.3	-0.0	1.4	0.1	1.6	-0.0	4.3	-0.2	-2.5	0.1	1.6	-0.0
				Earthquake X Mode 5	1.0	0.6	1.0	1.2	1.0	-0.0	1.0	-2.4	-1.5	1.2	1.0	-0.0
				Earthquake X Mode 6	-0.8	0.0	-0.2	-0.0	-0.3	0.0	-0.8	0.0	0.4	-0.0	-0.3	0.0
				Earthquake X Mode 7	0.4	-0.1	-0.5	-0.0	-0.2	0.0	0.4	-0.1	-0.2	-0.0	-0.2	0.0
				Earthquake X Mode 8	-0.2	0.1	0.3	0.0	0.1	-0.0	-0.2	0.1	0.0	0.0	0.1	-0.0
				Earthquake X Mode 9	-0.1	0.6	0.1	0.1	-0.0	-0.0	-0.1	0.5	0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-23.2	0.5	10.4	0.3	8.2	-0.1	-23.2	-0.3	-9.4	0.3	8.2	-0.1
				Earthquake Y Mode 2	-1.9	5.1	3.1	3.6	2.4	-0.0	-1.9	-3.4	-2.6	3.6	2.4	-0.0
				Earthquake Y Mode 3	89.9	-3.3	-41.5	-2.6	-33.7	0.1	89.9	2.9	39.3	-2.6	-33.7	0.1
				Earthquake Y Mode 4	0.8	-0.0	0.3	0.0	0.3	-0.0	0.8	-0.0	-0.5	0.0	0.3	-0.0
				Earthquake Y Mode 5	0.2	0.1	0.2	0.2	0.2	-0.0	0.2	-0.4	-0.3	0.2	0.2	-0.0
				Earthquake Y Mode 6	-6.4	0.1	-1.8	-0.1	-2.3	0.0	-6.4	0.4	3.6	-0.1	-2.3	0.0
				Earthquake Y Mode 7	0.1	-0.0	-0.2	-0.0	-0.0	0.0	0.1	-0.0	-0.1	-0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.4	0.3	0.7	0.0	0.2	-0.0	-0.4	0.2	0.1	0.0	0.2	-0.0
				Earthquake Y Mode 9	-0.0	0.2	0.0	0.0	-0.0	-0.0	-0.0	0.2	0.0	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.40	Self weight	388.6	14.9	-5.7	16.8	-5.7	0.0	0.0	373.9	-25.4	8.1	16.8	-5.7	0.0
				Dead load	146.1	6.4	-1.9	7.1	-1.9	0.0	146.1	-10.7	2.7	7.1	-1.9	0.0
				Live load	121.1	7.7	-2.7	8.7	-2.6	0.0	121.1	-13.2	3.6	8.7	-2.6	0.0
				Wind +X ecc.+	-1.4	-2.2	-0.1	-1.0	-0.0	0.0	-1.4	0.2	0.0	-1.0	-0.0	0.0
				Wind +X ecc.-	-4.8	-1.7	1.6	-0.8	1.0	-0.0	-4.8	0.2	-0.8	-0.8	1.0	-0.0
				Wind -X ecc.+	1.4	2.2	0.1	1.0	0.0	-0.0	1.4	-0.2	-0.0	1.0	0.0	-0.0
				Wind -X ecc.-	4.8	1.7	-1.6	0.8	-1.0	0.0	4.8	-0.2	0.8	0.8	-1.0	0.0
				Wind +Y ecc.+	5.1	1.1	-3.0	0.5	-1.9	-0.0	5.1	-0.1	1.7	0.5	-1.9	-0.0
				Wind +Y ecc.-	21.0	-1.2	-10.9	-0.6	-6.9	0.0	21.0	0.1	5.6	-0.6	-6.9	0.0
				Wind -Y ecc.+	-5.1	-1.1	3.0	-0.5	1.9	0.0	-5.1	0.1	-1.7	-0.5	1.9	0.0
				Wind -Y ecc.-	-21.0	1.2	10.9	0.6	6.9	-0.0	-21.0	-0.1	-5.6	0.6	6.9	-0.0
				Earthquake X Mode 1	-67.5	2.9	25.3	1.2	15.4	-0.1	-67.5	0.0	-11.7	1.2	15.4	-0.1
				Earthquake X Mode 2	-7.8	26.9	9.7	11.6	5.8	-0.1	-7.8	-1.0	-4.2	11.6	5.8	-0.1
				Earthquake X Mode 3	19.7	-1.6	-8.5	-0.7	-5.2	0.0	19.7	0.1	4.1	-0.7	-5.2	0.0
				Earthquake X Mode 4	2.4	0.5	3.8	0.2	2.5	-0.0	2.4	-0.1	-2.2	0.2	2.5	-0.0
				Earthquake X Mode 5	0.4	4.0	2.2	2.1	1.4	-0.0	0.4	-1.0	-1.3	2.1	1.4	-0.0
				Earthquake X Mode 6	-0.4	-0.1	-0.8	-0.1	-0.5	0.0	-0.4	0.0	0.5	-0.1	-0.5	0.0
				Earthquake X Mode 7	0.0	0.2	1.3	0.1	1.0	-0.0	0.0	-0.1	-1.0	0.1	1.0	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.6	-0.1	-0.4	0.0	-0.0	0.1	0.5	-0.1	-0.4	0.0
				Earthquake X Mode 9	-0.1	-1.3	-0.4	-0.8	-0.3	0.0	-0.1	0.7	0.3	-0.8	-0.3	0.0
				Earthquake Y Mode 1	-30.6	1.3	11.5	0.5	7.0	-0.0	-30.6	0.0	-5.3	0.5	7.0	-0.0
				Earthquake Y Mode 2	-2.4	8.3	3.0	3.6	1.8	-0.0	-2.4	-0.3	-1.3	3.6	1.8	-0.0



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C26	techo	50x50	12.00/14.50	Self weight	123.5	-3.1	-18.2	-2.4	-12.2	0.0	108.2	2.9	12.4	-2.4	-12.2	0.0
				Dead load	83.3	-0.9	-8.6	-0.7	-7.8	-0.0	83.3	1.0	10.9	-0.7	-7.8	-0.0
				Live load	22.2	-1.2	-7.6	-0.9	-4.4	0.0	22.2	1.1	3.5	-0.9	-4.4	0.0
				Wind +X ecc.+	-0.0	-0.6	0.1	-0.5	0.0	0.0	-0.0	0.6	-0.0	-0.5	0.0	0.0
				Wind +X ecc.-	-0.1	-0.5	0.2	-0.4	0.2	-0.0	-0.1	0.5	-0.2	-0.4	0.2	-0.0
				Wind -X ecc.+	0.0	0.6	-0.1	0.5	-0.0	-0.0	0.0	-0.6	0.0	0.5	-0.0	-0.0
				Wind -X ecc.-	0.1	0.5	-0.2	0.4	-0.2	0.0	0.1	-0.5	0.2	0.4	-0.2	0.0
				Wind +Y ecc.+	0.4	0.6	-0.6	0.5	-0.5	-0.0	0.4	-0.6	0.6	0.5	-0.5	-0.0
				Wind +Y ecc.-	0.8	0.1	-1.3	0.0	-1.0	0.0	0.8	-0.0	1.3	0.0	-1.0	0.0
				Wind -Y ecc.+	-0.4	-0.6	0.6	-0.5	0.5	0.0	-0.4	0.6	-0.6	-0.5	0.5	0.0
				Wind -Y ecc.-	-0.8	-0.1	1.3	-0.0	1.0	-0.0	-0.8	0.0	-1.3	-0.0	1.0	-0.0
				Earthquake X Mode 1	-1.9	1.0	3.8	0.7	2.8	-0.1	-1.9	-0.9	-3.1	0.7	2.8	-0.1
				Earthquake X Mode 2	0.1	11.8	0.1	9.1	0.0	-0.1	0.1	-10.9	-0.0	9.1	0.0	-0.1
				Earthquake X Mode 3	0.9	-0.3	-1.7	-0.3	-1.3	0.0	0.9	0.3	1.5	-0.3	-1.3	0.0
				Earthquake X Mode 4	0.6	-0.4	-1.5	-0.3	-1.0	0.0	0.6	0.2	0.9	-0.3	-1.0	0.0
				Earthquake X Mode 5	0.2	-3.7	-0.6	-2.4	-0.4	0.0	0.2	2.4	0.3	-2.4	-0.4	0.0
				Earthquake X Mode 6	-0.1	0.1	0.4	0.0	0.3	-0.0	-0.1	-0.0	-0.3	0.0	0.3	-0.0
				Earthquake X Mode 7	-0.2	0.2	0.8	0.1	0.4	-0.0	-0.2	-0.1	-0.3	0.1	0.4	-0.0
				Earthquake X Mode 8	0.1	-0.2	-0.5	-0.1	-0.3	-0.0	0.1	0.1	0.2	-0.1	-0.3	-0.0
				Earthquake X Mode 9	0.0	-1.5	-0.1	-0.8	-0.0	0.0	0.0	0.6	0.0	-0.8	-0.0	0.0
				Earthquake Y Mode 1	-0.9	0.5	1.7	0.3	1.3	-0.0	-0.9	-0.4	-1.4	0.3	1.3	-0.0
				Earthquake Y Mode 2	0.0	3.7	0.0	2.8	0.0	-0.0	0.0	-3.4	-0.0	2.8	0.0	-0.0
				Earthquake Y Mode 3	5.6	-2.1	-10.7	-1.6	-7.9	0.0	5.6	2.0	9.2	-1.6	-7.9	0.0
				Earthquake Y Mode 4	0.1	-0.1	-0.3	-0.0	-0.2	0.0	0.1	0.0	0.2	-0.0	-0.2	0.0
				Earthquake Y Mode 5	0.0	-0.7	-0.1	-0.4	-0.1	0.0	0.0	0.4	0.1	-0.4	-0.1	0.0
				Earthquake Y Mode 6	-1.2	0.5	3.2	0.3	2.1	-0.0	-1.2	-0.3	-2.1	0.3	2.1	-0.0
				Earthquake Y Mode 7	-0.1	0.1	0.2	0.0	0.1	-0.0	-0.1	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake Y Mode 8	0.3	-0.5	-1.2	-0.3	-0.7	-0.0	0.3	0.2	0.5	-0.3	-0.7	-0.0
				Earthquake Y Mode 9	0.0	-0.5	-0.0	-0.3	-0.0	0.0	0.0	0.2	0.0	-0.3	-0.0	0.0
	Floor 4	50x50	9.00/11.50	Self weight	253.6	-1.5	-16.1	-1.1	-12.8	0.0	238.2	1.2	15.9	-1.1	-12.8	0.0
				Dead load	125.5	-0.6	-1.4	-0.5	-0.5	-0.0	125.5	0.6	-0.1	-0.5	-0.5	-0.0
				Live load	78.1	-0.8	-10.0	-0.6	-8.2	0.0	78.1	0.7	10.5	-0.6	-8.2	0.0
				Wind +X ecc.+	-0.1	-1.0	0.1	-0.9	0.0	0.0	-0.1	1.4	-0.1	-0.9	0.0	0.0
				Wind +X ecc.-	-0.5	-0.8	0.4	-0.7	0.4	-0.0	-0.5	1.1	-0.5	-0.7	0.4	-0.0
				Wind -X ecc.+	0.1	1.0	-0.1	0.9	-0.0	-0.0	0.1	-1.4	0.1	0.9	-0.0	-0.0
				Wind -X ecc.-	0.5	0.8	-0.4	0.7	-0.4	0.0	0.5	-1.1	0.5	0.7	-0.4	0.0
				Wind +Y ecc.+	1.6	0.8	-1.3	0.7	-1.2	-0.0	1.6	-1.0	1.8	0.7	-1.2	-0.0
				Wind +Y ecc.-	3.4	-0.2	-2.8	-0.2	-2.6	0.0	3.4	0.4	3.8	-0.2	-2.6	0.0
				Wind -Y ecc.+	-1.6	-0.8	1.3	-0.7	1.2	0.0	-1.6	1.0	-1.8	-0.7	1.2	0.0
				Wind -Y ecc.-	-3.4	0.2	2.8	0.2	2.6	-0.0	-3.4	-0.4	-3.8	0.2	2.6	-0.0
				Earthquake X Mode 1	-8.0	1.8	6.5	1.6	5.9	-0.1	-8.0	-2.2	-8.3	1.6	5.9	-0.1
				Earthquake X Mode 2	-0.4	17.8	0.5	16.1	0.5	-0.1	-0.4	-22.6	-0.7	16.1	0.5	-0.1
				Earthquake X Mode 3	3.9	-0.7	-3.2	-0.7	-2.9	0.0	3.9	1.0	4.1	-0.7	-2.9	0.0
				Earthquake X Mode 4	2.0	-0.5	-1.9	-0.3	-1.3	0.0	2.0	0.3	1.4	-0.3	-1.3	0.0
				Earthquake X Mode 5	0.7	-4.1	-0.7	-2.6	-0.5	0.0	0.7	2.4	0.4	-2.6	-0.5	0.0
				Earthquake X Mode 6	-0.5	0.1	0.5	0.1	0.4	-0.0	-0.5	-0.1	-0.4	0.1	0.4	-0.0
				Earthquake X Mode 7	-0.4	0.0	0.2	-0.0	-0.0	0.0	-0.4	0.1	0.3	-0.0	-0.0	0.0
				Earthquake X Mode 8	0.2	-0.0	-0.1	0.0	0.0	0.0	0.2	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	0.0	-0.2	0.0	0.2	0.0	-0.0	0.0	-0.7	-0.1	0.2	0.0	-0.0
				Earthquake Y Mode 1	-3.7	0.8	3.0	0.7	2.7	-0.1	-3.7	-1.0	-3.8	0.7	2.7	-0.1
				Earthquake Y Mode 2	-0.1	5.5	0.1	5.0	0.1	-0.0	-0.1	-7.0	-0.2	5.0	0.1	-0.0
				Earthquake Y Mode 3	23.8	-4.5	-19.6	-4.2	-17.9	0.1	23.8	6.1	25.1	-4.2	-17.9	0.1
				Earthquake Y Mode 4	0.4	-0.1	-0.4	-0.1	-0.3	0.0	0.4	0.1	0.3	-0.1	-0.3	0.0
				Earthquake Y Mode 5	0.1	-0.8	-0.1	-0.5	-0.1	0.0	0.1	0.4	0.1	-0.5	-0.1	0.0
				Earthquake Y Mode 6	-4.4	0.7	4.5	0.5	3.1	-0.0	-4.4	-0.5	-3.3	0.5	3.1	-0.0
				Earthquake Y Mode 7	-0.1	0.0	0.1	-0.0	-0.0	0.0	-0.1	0.0	0.1	-0.0	-0.0	0.0
				Earthquake Y Mode 8	0.6	-0.1	-0.4	0.0	0.0	0.0	0.6	-0.2	-0.4	0.0	0.0	0.0
				Earthquake Y Mode 9	0.0	-0.1	0.0	0.1	0.0	-0.0	0.0	-0.3	-0.0	0.1	0.0	-0.0
	Floor 3	50x50	6.00/8.50	Self weight	383.0	-1.5	-15.9	-1.3	-12.9	0.0	367.7	1.8	16.5	-1.3	-12.9	0.0
				Dead load	166.9	-0.6	-2.7	-0.5	-2.3	-0.0	166.9	0.7	3.0	-0.5	-2.3	-0.0
				Live load	134.1	-0.7	-9.1	-0.6	-7.4	0.0	134.1	0.8	9.3	-0.6	-7.4	0.0
				Wind +X ecc.+	-0.2	-1.4	0.1	-1.3	0.1	0.0	-0.2	1.7	-0.1	-1.3	0.1	0.0
				Wind +X ecc.-	-1.0	-1.1	0.5	-1.0	0.5	-0.0	-1.0	1.3	-0.6	-1.0	0.5	-0.0
				Wind -X ecc.+	0.2	1.4	-0.1	1.3	-0.1	-0.0	0.2	-1.7	0.1	1.3	-0.1	-0.0
				Wind -X ecc.-	1.0	1.1	-0.5	1.0	-0.5	0.0	1.0	-1.3	0.6	1.0	-0.5	0.0
				Wind +Y ecc.+	3.4	1.0	-1.9	0.9	-1.7	-0.0	3.4	-1.1	2.3	0.9	-1.7	-0.0
				Wind +Y ecc.-	7.3	-0.4	-4.1	-0.4	-3.6	0.0	7.3	0.6	5.0	-0.4	-3.6	0.0
				Wind -Y ecc.+	-3.4	-1.0	1.9	-0.9	1.7	0.0	-3.4	1.1	-2.3	-0.9	1.7	0.0
				Wind -Y ecc.-	-7.3	0.4	4.1	0.4	3.6	-0.0	-7.3	-0.6	5.0	0.4	3.6	-0.0
				Earthquake X Mode 1	-16.2	2.4	8.8	2.0	7.5	-0.2	-16.2	-2.6	-9.8	2.0	7.5	-0.2
				Earthquake X Mode 2	-0.9	23.5	0.8	19.5	0.6	-0.1	-0.9	-25.3	-0.8	19.5	0.6	-0.1
				Earthquake X Mode 3	7.8	-1.1	-4.3	-0.9	-3.6	0.0	7.8	1.2	4.7	-0.9	-3.6	0.0
				Earthquake X Mode 4	2.8	-0.2	-0.9	-0.1	-0.4	0.0	2.8	-0.0	-0.1	-0.1	-0.4	0.0
				Earthquake X Mode 5	0.9	-1.9	-0.3	-0.5	-0.1	0.0	0.9	-0.7	-0.2	-0.5	-0.1	0.0
				Earthquake X Mode 6	-0.8	0.0	0.3	0.0	0.1	-0.0	-0.8	0.0	0.0	0.0	0.1	-0.0
				Earthquake X Mode 7	-0.1	-0.2	-0.8	-0.2	-0.6	0.0	-0.1	0.2	0.7	-0.2	-0.6	0.0
				Earthquake X Mode 8	0.0	0.2	0.5	0.1	0.4	0.0	0.0	-0.2	-0.5	0.1	0.4	0.0
				Earthquake X Mode 9	-0.0	1.3	0.1	1.0	0.0	-0.0	-0.0	-1.2	-0.0	1.0	0.0	-0.0
				Earthquake Y Mode 1	-7.4	1.1	4.0	0.9	3.4	-0.1	-7.4	-1.2	-4.5	0.9	3.4	-0.1
				Earthquake Y Mode 2	-0.3	7.3	0.2	6.0	0.2	-0.0	-0.3	-7.8	-0.2	6.0	0.2	-0.0
				Earthquake Y Mode 3	48.0	-6.6	-26.2	-5.6	-22.2	0.1	48.0	7.4	29.2	-5.6	-22.2	0.1
				Earthquake Y Mode 4	0.5	-0.0	-0.2	-0.0	-0.1	0.0	0.5					



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	50x50	3.00/5.50	Self weight	512.4	-1.3	-17.7	-1.0	-13.8	0.0	497.0	1.2	16.7	-1.0	-13.8	0.0
				Dead load	208.3	-0.6	-2.8	-0.4	-2.1	0.0	208.3	0.5	2.4	-0.4	-2.1	0.0
				Live load	190.0	-0.6	-10.3	-0.5	-8.0	0.0	190.0	0.6	9.7	-0.5	-8.0	0.0
				Wind +X ecc.+	-0.2	-1.9	0.1	-1.5	0.0	0.0	-0.2	1.8	-0.1	-1.5	0.0	0.0
				Wind +X ecc.-	-1.6	-1.5	0.7	-1.1	0.6	-0.0	-1.6	1.3	-0.7	-1.1	0.6	-0.0
				Wind -X ecc.+	0.2	1.9	-0.1	1.5	-0.0	-0.0	0.2	-1.8	0.1	1.5	-0.0	-0.0
				Wind -X ecc.-	1.6	1.5	-0.7	1.1	-0.6	0.0	1.6	-1.3	0.7	1.1	-0.6	0.0
				Wind +Y ecc.+	5.6	1.2	-2.6	0.9	-2.1	-0.0	5.6	-1.0	2.7	0.9	-2.1	-0.0
				Wind +Y ecc.-	12.1	-0.8	-5.6	-0.6	-4.5	0.0	12.1	0.9	5.7	-0.6	-4.5	0.0
				Wind -Y ecc.+	-5.6	-1.2	2.6	-0.9	2.1	0.0	-5.6	1.0	-2.7	-0.9	2.1	0.0
				Wind -Y ecc.-	-12.1	0.8	5.6	0.6	4.5	-0.0	-12.1	-0.9	-5.7	0.6	4.5	-0.0
				Earthquake X Mode 1	-25.5	2.9	10.7	2.2	8.3	-0.2	-25.5	-2.6	-9.9	2.2	8.3	-0.2
				Earthquake X Mode 2	-1.7	28.0	1.2	20.5	0.8	-0.1	-1.7	-23.2	-0.8	20.5	0.8	-0.1
				Earthquake X Mode 3	12.3	-1.4	-5.2	-1.1	-4.0	0.0	12.3	1.3	4.9	-1.1	-4.0	0.0
				Earthquake X Mode 4	2.5	0.2	0.7	0.2	0.8	-0.0	2.5	-0.4	-1.3	0.2	0.8	-0.0
				Earthquake X Mode 5	0.7	1.7	0.3	1.9	0.4	-0.0	0.7	-3.1	-0.6	1.9	0.4	-0.0
				Earthquake X Mode 6	-0.7	-0.0	-0.2	-0.0	-0.2	0.0	-0.7	0.1	0.4	-0.0	-0.2	0.0
				Earthquake X Mode 7	0.2	-0.1	-0.3	-0.0	-0.1	0.0	0.2	-0.0	-0.1	-0.0	-0.1	0.0
				Earthquake X Mode 8	-0.1	0.1	0.2	0.0	0.1	-0.0	-0.1	0.0	0.1	0.0	0.1	-0.0
				Earthquake X Mode 9	-0.0	0.5	-0.0	0.1	-0.0	-0.0	-0.0	0.4	0.0	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-11.6	1.3	4.9	1.0	3.7	-0.1	-11.6	-1.2	-4.5	1.0	3.7	-0.1
				Earthquake Y Mode 2	-0.5	8.7	0.4	6.3	0.3	-0.0	-0.5	-7.2	-0.3	6.3	0.3	-0.0
				Earthquake Y Mode 3	75.4	-8.7	-31.8	-6.6	-24.7	0.1	75.4	7.9	29.9	-6.6	-24.7	0.1
				Earthquake Y Mode 4	0.5	0.0	0.1	0.0	0.2	-0.0	0.5	-0.1	-0.3	0.0	0.2	-0.0
				Earthquake Y Mode 5	0.1	0.3	0.1	0.3	0.1	-0.0	0.1	-0.6	-0.1	0.3	0.1	-0.0
				Earthquake Y Mode 6	-5.8	-0.3	-1.4	-0.4	-1.8	0.0	-5.8	0.6	3.1	-0.4	-1.8	0.0
				Earthquake Y Mode 7	0.1	-0.0	-0.1	-0.0	-0.0	0.0	0.1	-0.0	-0.0	-0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.3	0.2	0.6	0.1	0.2	-0.0	-0.3	0.1	0.2	0.1	0.2	-0.0
				Earthquake Y Mode 9	-0.0	0.2	-0.0	0.0	-0.0	-0.0	-0.0	0.1	0.0	0.0	-0.0	-0.0
	Floor 1	50x50	0.00/2.50	Self weight	640.6	-0.8	-8.8	-0.6	-9.2	0.0	625.3	0.8	14.1	-0.6	-9.2	0.0
				Dead load	249.7	-0.3	-1.5	-0.3	-1.5	0.0	249.7	0.5	2.2	-0.3	-1.5	0.0
				Live load	245.2	-0.4	-5.1	-0.3	-5.3	0.0	245.2	0.3	8.1	-0.3	-5.3	0.0
				Wind +X ecc.+	-0.3	-2.6	-0.0	-1.4	0.0	0.0	-0.3	0.9	-0.0	-1.4	0.0	0.0
				Wind +X ecc.-	-2.3	-2.0	1.0	-1.1	0.6	-0.0	-2.3	0.7	-0.5	-1.1	0.6	-0.0
				Wind -X ecc.+	0.3	2.6	0.0	1.4	-0.0	-0.0	0.3	-0.9	0.0	1.4	-0.0	-0.0
				Wind -X ecc.-	2.3	2.0	-1.0	1.1	-0.6	0.0	2.3	-0.7	0.5	1.1	-0.6	0.0
				Wind +Y ecc.+	7.9	1.2	-4.1	0.6	-2.5	-0.0	7.9	-0.3	2.1	0.6	-2.5	-0.0
				Wind +Y ecc.-	17.0	-1.6	-8.7	-1.0	-5.1	0.0	17.0	0.8	4.2	-1.0	-5.1	0.0
				Wind -Y ecc.+	-7.9	-1.2	4.1	-0.6	2.5	0.0	-7.9	0.3	-2.1	-0.6	2.5	0.0
				Wind -Y ecc.-	-17.0	1.6	8.7	1.0	5.1	-0.0	-17.0	-0.8	-4.2	1.0	5.1	-0.0
				Earthquake X Mode 1	-33.7	3.7	13.3	2.1	7.7	-0.1	-33.7	-1.6	-6.0	2.1	7.7	-0.1
				Earthquake X Mode 2	-2.4	31.6	2.0	16.8	0.9	-0.1	-2.4	-10.3	-0.3	16.8	0.9	-0.1
				Earthquake X Mode 3	16.3	-2.0	-6.8	-1.1	-3.9	0.0	16.3	0.8	3.0	-1.1	-3.9	0.0
				Earthquake X Mode 4	1.5	0.6	2.2	0.4	1.4	-0.0	1.5	-0.3	-1.2	0.4	1.4	-0.0
				Earthquake X Mode 5	0.3	4.7	1.0	2.8	0.6	-0.0	0.3	-2.3	-0.5	2.8	0.6	-0.0
				Earthquake X Mode 6	-0.4	-0.1	-0.6	-0.1	-0.4	0.0	-0.4	0.1	0.4	-0.1	-0.4	0.0
				Earthquake X Mode 7	-0.0	0.2	0.8	0.2	0.6	-0.0	-0.0	-0.2	-0.6	0.2	0.6	-0.0
				Earthquake X Mode 8	0.0	-0.2	-0.6	-0.1	-0.4	0.0	0.0	0.2	0.4	-0.1	-0.4	0.0
				Earthquake X Mode 9	-0.0	-1.4	-0.0	-1.0	-0.0	0.0	-0.0	1.0	0.0	-1.0	-0.0	0.0
				Earthquake Y Mode 1	-15.3	1.7	6.1	1.0	3.5	-0.0	-15.3	-0.7	-2.7	1.0	3.5	-0.0
				Earthquake Y Mode 2	-0.8	9.8	0.6	5.2	0.3	-0.0	-0.8	-3.2	-0.1	5.2	0.3	-0.0
				Earthquake Y Mode 3	100.1	-12.4	-41.6	-7.1	-24.1	0.1	100.1	5.2	18.7	-7.1	-24.1	0.1
				Earthquake Y Mode 4	0.3	0.1	0.4	0.1	0.3	-0.0	0.3	-0.1	-0.2	0.1	0.3	-0.0
				Earthquake Y Mode 5	0.1	0.8	0.2	0.5	0.1	-0.0	0.1	-0.4	-0.1	0.5	0.1	-0.0
				Earthquake Y Mode 6	-3.4	-1.1	-5.3	-0.7	-3.3	0.0	-3.4	0.7	3.0	-0.7	-3.3	0.0
				Earthquake Y Mode 7	-0.0	0.1	0.2	0.1	0.2	-0.0	-0.0	-0.1	-0.2	0.1	0.2	-0.0
				Earthquake Y Mode 8	0.0	-0.5	-1.4	-0.4	-1.0	0.0	0.0	0.4	1.0	-0.4	-1.0	0.0
				Earthquake Y Mode 9	-0.0	-0.5	-0.0	-0.4	-0.0	0.0	-0.0	0.4	0.0	-0.4	-0.0	0.0
C27	techo	50x50	12.00/14.50	Self weight	126.3	1.3	-18.7	1.0	-13.1	0.0	111.0	-1.3	14.0	1.0	-13.1	0.0
				Dead load	85.9	0.8	-10.8	0.5	-9.6	-0.0	85.9	-0.4	13.3	0.5	-9.6	-0.0
				Live load	23.3	0.8	-7.9	0.6	-4.7	0.0	23.3	-0.8	3.8	0.6	-4.7	0.0
				Wind +X ecc.+	0.1	-0.6	-0.1	-0.5	-0.1	0.0	0.1	0.6	0.1	-0.5	-0.1	0.0
				Wind +X ecc.-	0.0	-0.5	-0.0	-0.4	-0.0	-0.0	0.0	0.5	-0.0	-0.4	-0.0	-0.0
				Wind -X ecc.+	-0.1	0.6	0.1	0.5	0.1	-0.0	-0.1	-0.6	-0.1	0.5	0.1	-0.0
				Wind -X ecc.-	-0.0	0.5	0.0	0.4	0.0	0.0	-0.0	-0.5	0.0	0.4	0.0	0.0
				Wind +Y ecc.+	0.8	0.4	-1.2	0.3	-0.9	-0.0	0.8	-0.4	1.1	0.3	-0.9	-0.0
				Wind +Y ecc.-	1.0	-0.2	-1.4	-0.2	-1.1	0.0	1.0	0.3	1.4	-0.2	-1.1	0.0
				Wind -Y ecc.+	-0.8	-0.4	1.2	-0.3	0.9	0.0	-0.8	0.4	-1.1	-0.3	0.9	0.0
				Wind -Y ecc.-	-1.0	0.2	1.4	0.2	1.1	-0.0	-1.0	-0.3	-1.4	0.2	1.1	-0.0
				Earthquake X Mode 1	-0.4	1.3	0.3	1.0	0.2	-0.1	-0.4	-1.2	-0.3	1.0	0.2	-0.1
				Earthquake X Mode 2	-0.1	11.7	-0.4	9.1	-0.5	-0.1	-0.1	-10.9	0.7	9.1	-0.5	-0.1
				Earthquake X Mode 3	1.1	-0.7	-1.7	-0.5	-1.3	0.0	1.1	0.6	1.6	-0.5	-1.3	0.0
				Earthquake X Mode 4	0.1	-0.4	-0.4	-0.3	-0.3	0.0	0.1	0.3	0.3	-0.3	-0.3	0.0
				Earthquake X Mode 5	0.2	-3.6	-0.1	-2.4	-0.1	0.0	0.2	2.4	0.1	-2.4	-0.1	0.0
				Earthquake X Mode 6	-0.1	0.1	0.4	0.0	0.2	-0.0	-0.1	-0.1	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 7	-0.1	0.2	0.3	0.1	0.2	-0.0	-0.1	-0.1	-0.1	0.1	0.2	-0.0
				Earthquake X Mode 8	0.1	-0.2	-0.5	-0.1	-0.3	-0.0	0.1	0.1	0.2	-0.1	-0.3	-0.0
				Earthquake X Mode 9	0.0	-1.5	0.2	-0.8	0.1	0.0	0.0	0.6	-0.1	-0.8	0.1	0.0
				Earthquake Y Mode 1	-0.2	0.6	0.1	0.5	0.1	-0.0	-0.2	-0.5	-0.1	0.5	0.1	-0.0
				Earthquake Y Mode 2	-0.0	3.6	-0.1	2.8	-0.1	-0.0	-0.0	-3.4	0.2	2.8	-0.1	-0.0
				Earthquake Y Mode 3	6.7	-4.1	-10.6	-3.2	-8.1	0.0	6.7	3.8	9.7	-3.2	-8.1	0.0
				Earthquake Y Mode 4	0.0	-0.1	-0.1	-0.1								



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 4	50x50	9.00/11.50	Self weight	256.4	0.8	-15.4	0.6	-12.1	0.0	0.0	241.1	-0.8	14.8	0.6	-12.1	0.0
				Dead load	129.8	0.5	-1.9	0.4	-0.8	-0.0	129.8	-0.5	-0.0	0.4	-0.8	-0.0
				Live load	80.5	0.3	-10.2	0.2	-8.4	0.0	80.5	-0.2	10.8	0.2	-8.4	0.0
				Wind +X ecc.+	0.2	-1.0	-0.1	-0.9	-0.1	0.0	0.2	1.4	0.1	-0.9	-0.1	0.0
				Wind +X ecc.-	0.0	-0.8	0.0	-0.7	0.0	-0.0	0.0	1.1	-0.0	-0.7	0.0	-0.0
				Wind -X ecc.+	-0.2	1.0	0.1	0.9	0.1	-0.0	-0.2	-1.4	-0.1	0.9	0.1	-0.0
				Wind -X ecc.-	-0.0	0.8	-0.0	0.7	-0.0	0.0	-0.0	-1.1	0.0	0.7	-0.0	0.0
				Wind +Y ecc.+	2.7	0.7	-1.9	0.6	-1.8	-0.0	2.7	-0.9	2.7	0.6	-1.8	-0.0
				Wind +Y ecc.-	3.4	-0.3	-2.3	-0.3	-2.2	0.0	3.4	0.5	3.2	-0.3	-2.2	0.0
				Wind -Y ecc.+	-2.7	-0.7	1.9	-0.6	1.8	0.0	-2.7	0.9	-2.7	-0.6	1.8	0.0
				Wind -Y ecc.-	-3.4	0.3	2.3	0.3	2.2	-0.0	-3.4	-0.5	-3.2	0.3	2.2	-0.0
				Earthquake X Mode 1	-0.9	1.8	0.3	1.6	0.4	-0.1	-0.9	-2.3	-0.6	1.6	0.4	-0.1
				Earthquake X Mode 2	0.7	17.5	-1.5	15.9	-1.5	-0.1	0.7	-22.3	2.2	15.9	-1.5	-0.1
				Earthquake X Mode 3	3.7	-0.9	-2.6	-0.8	-2.4	0.0	3.7	1.1	3.4	-0.8	-2.4	0.0
				Earthquake X Mode 4	0.5	-0.5	-0.5	-0.3	-0.4	0.0	0.5	0.3	0.4	-0.3	-0.4	0.0
				Earthquake X Mode 5	0.3	-4.1	-0.0	-2.6	-0.0	0.0	0.3	2.4	0.1	-2.6	-0.0	0.0
				Earthquake X Mode 6	-0.4	0.1	0.5	0.1	0.3	-0.0	-0.4	-0.1	-0.3	0.1	0.3	-0.0
				Earthquake X Mode 7	-0.1	0.1	0.1	-0.0	-0.0	0.0	-0.1	0.1	0.1	-0.0	-0.0	0.0
				Earthquake X Mode 8	0.2	-0.1	-0.1	0.0	0.0	0.0	0.2	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	-0.0	-0.2	0.1	0.2	-0.0	-0.0	-0.0	-0.7	0.1	0.2	-0.0	-0.0
				Earthquake Y Mode 1	-0.4	0.8	0.1	0.7	0.2	-0.1	-0.4	-1.0	-0.3	0.7	0.2	-0.1
				Earthquake Y Mode 2	0.2	5.4	-0.4	4.9	-0.5	-0.0	0.2	-6.9	0.7	4.9	-0.5	-0.0
				Earthquake Y Mode 3	22.8	-5.3	-16.3	-4.9	-15.0	0.1	22.8	6.9	21.1	-4.9	-15.0	0.1
				Earthquake Y Mode 4	0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.1	-0.1	-0.1	0.0
				Earthquake Y Mode 5	0.1	-0.7	-0.0	-0.5	-0.0	0.0	0.1	0.4	0.0	-0.5	-0.0	0.0
				Earthquake Y Mode 6	-3.6	0.7	3.9	0.5	2.6	-0.0	-3.6	-0.5	-2.7	0.5	2.6	-0.0
				Earthquake Y Mode 7	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0
				Earthquake Y Mode 8	0.5	-0.1	-0.4	0.0	0.0	0.0	0.5	-0.2	-0.5	0.0	0.0	0.0
				Earthquake Y Mode 9	-0.0	-0.1	0.0	0.1	-0.0	-0.0	-0.0	-0.3	0.0	0.1	-0.0	-0.0
Floor 3	50x50	6.00/8.50	Self weight	385.7	0.5	-15.6	0.5	-12.7	0.0	0.0	370.4	-0.7	16.3	0.5	-12.7	0.0
				Dead load	172.5	0.2	-3.5	0.2	-3.0	-0.0	172.5	-0.2	4.0	0.2	-3.0	-0.0
				Live load	137.8	0.2	-9.4	0.2	-7.6	0.0	137.8	-0.3	9.6	0.2	-7.6	0.0
				Wind +X ecc.+	0.3	-1.4	-0.1	-1.2	-0.1	0.0	0.3	1.7	0.1	-1.2	-0.1	0.0
				Wind +X ecc.-	0.0	-1.1	0.0	-1.0	0.0	-0.0	0.0	1.3	-0.1	-1.0	0.0	-0.0
				Wind -X ecc.+	-0.3	1.4	0.1	1.2	0.1	-0.0	-0.3	-1.7	-0.1	1.2	0.1	-0.0
				Wind -X ecc.-	-0.0	1.1	-0.0	1.0	-0.0	0.0	-0.0	-1.3	0.1	1.0	-0.0	0.0
				Wind +Y ecc.+	5.1	0.9	-2.6	0.8	-2.3	-0.0	5.1	-1.0	3.2	0.8	-2.3	-0.0
				Wind +Y ecc.-	6.4	-0.5	-3.2	-0.5	-2.9	0.0	6.4	0.7	4.0	-0.5	-2.9	0.0
				Wind -Y ecc.+	-5.1	-0.9	2.6	-0.8	2.3	0.0	-5.1	1.0	-3.2	-0.8	2.3	0.0
				Wind -Y ecc.-	-6.4	0.5	3.2	0.5	2.9	-0.0	-6.4	-0.7	4.0	0.5	2.9	-0.0
				Earthquake X Mode 1	-1.6	2.3	0.6	1.9	0.6	-0.2	-1.6	-2.5	-0.9	1.9	0.6	-0.2
				Earthquake X Mode 2	1.9	23.1	-2.2	19.2	-1.9	-0.1	1.9	-25.0	2.4	19.2	-1.9	-0.1
				Earthquake X Mode 3	6.8	-1.1	-3.4	-1.0	-2.9	0.0	6.8	1.3	3.8	-1.0	-2.9	0.0
				Earthquake X Mode 4	0.8	-0.3	-0.3	-0.1	-0.1	0.0	0.8	-0.0	0.0	-0.1	-0.1	0.0
				Earthquake X Mode 5	0.4	-2.0	0.0	-0.5	-0.0	0.0	0.4	-0.7	0.1	-0.5	-0.0	0.0
				Earthquake X Mode 6	-0.6	0.1	0.3	0.0	0.1	-0.0	-0.6	-0.0	0.0	0.0	0.1	-0.0
				Earthquake X Mode 7	-0.0	-0.2	-0.3	-0.1	-0.2	0.0	-0.0	0.2	0.3	-0.1	-0.2	0.0
				Earthquake X Mode 8	0.0	0.2	0.5	0.1	0.3	0.0	0.0	-0.1	-0.4	0.1	0.3	0.0
				Earthquake X Mode 9	0.0	1.3	-0.2	1.0	-0.1	-0.0	0.0	-1.1	0.2	1.0	-0.1	-0.0
				Earthquake Y Mode 1	-0.7	1.0	0.3	0.9	0.3	-0.1	-0.7	-1.2	-0.4	0.9	0.3	-0.1
				Earthquake Y Mode 2	0.6	7.1	-0.7	5.9	-0.6	-0.0	0.6	-7.7	0.8	5.9	-0.6	-0.0
				Earthquake Y Mode 3	42.2	-6.8	-20.9	-5.9	-17.8	0.1	42.2	7.9	23.6	-5.9	-17.8	0.1
				Earthquake Y Mode 4	0.1	-0.1	-0.1	-0.0	-0.0	0.0	0.1	-0.0	0.0	-0.0	-0.0	0.0
				Earthquake Y Mode 5	0.1	-0.4	0.0	-0.1	-0.0	0.0	0.1	-0.1	0.0	-0.1	-0.0	0.0
				Earthquake Y Mode 6	-5.3	0.5	2.2	0.2	0.8	-0.0	-5.3	-0.0	0.2	0.2	0.8	-0.0
				Earthquake Y Mode 7	-0.0	-0.1	-0.1	-0.0	-0.1	0.0	-0.0	0.1	0.1	-0.0	-0.1	0.0
				Earthquake Y Mode 8	0.1	0.4	1.1	0.3	0.9	0.0	0.1	-0.4	-1.0	0.3	0.9	0.0
				Earthquake Y Mode 9	0.0	0.5	-0.1	0.4	-0.1	-0.0	0.0	-0.4	0.1	0.4	-0.1	-0.0
Floor 2	50x50	3.00/5.50	Self weight	514.9	-0.2	-17.7	-0.0	-13.7	0.0	0.0	499.6	-0.1	16.5	-0.0	-13.7	0.0
				Dead load	215.0	-0.0	-3.4	0.0	-2.5	0.0	215.0	-0.1	3.0	0.0	-2.5	0.0
				Live load	194.9	-0.1	-10.8	-0.0	-8.4	0.0	194.9	-0.0	10.1	-0.0	-8.4	0.0
				Wind +X ecc.+	0.4	-1.9	-0.1	-1.4	-0.1	0.0	0.4	1.7	0.1	-1.4	-0.1	0.0
				Wind +X ecc.-	-0.0	-1.5	0.1	-1.1	0.1	-0.0	-0.0	1.3	-0.1	-1.1	0.1	-0.0
				Wind -X ecc.+	-0.4	1.9	0.1	1.4	0.1	-0.0	-0.4	-1.7	-0.1	1.4	0.1	-0.0
				Wind -X ecc.-	0.0	1.5	-0.1	1.1	-0.1	0.0	0.0	-1.3	0.1	1.1	-0.1	0.0
				Wind +Y ecc.+	7.9	1.3	-3.4	0.9	-2.7	-0.0	7.9	-1.0	3.4	0.9	-2.7	-0.0
				Wind +Y ecc.-	9.9	-0.6	-4.1	-0.5	-3.4	0.0	9.9	0.8	4.3	-0.5	-3.4	0.0
				Wind -Y ecc.+	-7.9	-1.3	3.4	-0.9	2.7	0.0	-7.9	1.0	-3.4	-0.9	2.7	0.0
				Wind -Y ecc.-	-9.9	0.6	4.1	0.5	3.4	-0.0	-9.9	-0.8	4.3	0.5	3.4	-0.0
				Earthquake X Mode 1	-2.4	2.6	0.8	2.0	0.8	-0.2	-2.4	-2.4	-1.2	2.0	0.8	-0.2
				Earthquake X Mode 2	3.3	27.5	-2.8	20.1	-2.0	-0.1	3.3	-22.8	2.2	20.1	-2.0	-0.1
				Earthquake X Mode 3	10.2	-1.3	-4.0	-1.0	-3.1	0.0	10.2	1.2	3.7	-1.0	-3.1	0.0
				Earthquake X Mode 4	0.7	0.1	0.1	0.2	0.2	-0.0	0.7	-0.3	-0.3	0.2	0.2	-0.0
				Earthquake X Mode 5	0.4	1.6	-0.0	1.8	-0.0	-0.0	0.4	-3.0	0.1	1.8	-0.0	-0.0
				Earthquake X Mode 6	-0.6	-0.0	-0.1	-0.0	-0.2	0.0	-0.6	0.1	0.3	-0.0	-0.2	0.0
				Earthquake X Mode 7	0.1	-0.1	-0.2	-0.0	-0.0	0.0	0.1	-0.0	-0.1	-0.0	-0.0	0.0
				Earthquake X Mode 8	-0.1	0.1	0.2	0.0	0.1	-0.0	-0.1	0.0	0.1	0.0	0.1	-0.0
				Earthquake X Mode 9	0.1	0.5	-0.1	0.1	-0.0	-0.0	0.1	0.4	-0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	-1.1	1.2	0.4	0.9	0.4	-0.1	-1.1	-1.1	-0.5	0.9	0.4	-0.1
				Earthquake Y Mode 2	1.0	8.5	-0.9	6.2	-0.6	-0.0	1.0	-7.0	0.7	6.2	-0.6	-0.0
				Earthquake Y Mode 3	62.5	-7.9	-24.3	-6.2	-18.8	0.1	62.5	7.5	22.6	-6.2	-18.8	0.1
				Earthquake Y Mode 4	0.1	0.0	0.0	0								



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	50x50	0.00/2.50	Self weight	643.0	-0.5	-8.9	-0.3	-9.3	0.0	627.6	0.2	14.4	-0.3	-9.3	0.0
				Dead load	256.9	-0.1	-1.7	-0.1	-1.7	0.0	256.9	0.1	2.6	-0.1	-1.7	0.0
				Live load	251.4	-0.3	-5.4	-0.2	-5.6	0.0	251.4	0.1	8.7	-0.2	-5.6	0.0
				Wind +X ecc.+	0.5	-2.5	-0.0	-1.4	-0.0	0.0	0.5	0.9	0.1	-1.4	-0.0	0.0
				Wind +X ecc.-	-0.1	-2.0	0.3	-1.1	0.2	-0.0	-0.1	0.7	-0.1	-1.1	0.2	-0.0
				Wind -X ecc.+	-0.5	2.5	0.0	1.4	0.0	-0.0	-0.5	-0.9	-0.1	1.4	0.0	-0.0
				Wind -X ecc.-	0.1	2.0	-0.3	1.1	-0.2	0.0	0.1	-0.7	0.1	1.1	-0.2	0.0
				Wind +Y ecc.+	10.4	1.3	-5.2	0.7	-2.9	-0.0	10.4	-0.4	2.0	0.7	-2.9	-0.0
				Wind +Y ecc.-	13.1	-1.5	-6.7	-0.9	-3.8	0.0	13.1	0.6	2.8	-0.9	-3.8	0.0
				Wind -Y ecc.+	-10.4	-1.3	5.2	-0.7	2.9	0.0	-10.4	0.4	-2.0	0.7	2.9	0.0
				Wind -Y ecc.-	-13.1	1.5	6.7	0.9	3.8	-0.0	-13.1	-0.6	-2.8	0.9	3.8	-0.0
				Earthquake X Mode 1	-3.3	3.6	2.6	1.9	1.5	-0.1	-3.3	-1.3	-1.2	1.9	1.5	-0.1
				Earthquake X Mode 2	4.4	31.4	-3.7	16.5	-1.8	-0.1	4.4	-9.9	0.7	16.5	-1.8	-0.1
				Earthquake X Mode 3	12.9	-1.9	-5.3	-1.1	-2.9	0.0	12.9	0.7	2.0	-1.1	-2.9	0.0
				Earthquake X Mode 4	0.6	0.6	0.7	0.3	0.4	-0.0	0.6	-0.3	-0.4	0.3	0.4	-0.0
				Earthquake X Mode 5	0.4	4.6	-0.0	2.7	0.0	-0.0	0.4	-2.2	-0.0	2.7	0.0	-0.0
				Earthquake X Mode 6	-0.4	-0.1	-0.5	-0.1	-0.3	0.0	-0.4	0.1	0.3	-0.1	-0.3	0.0
				Earthquake X Mode 7	-0.0	0.2	0.4	0.2	0.2	-0.0	-0.0	-0.2	-0.3	0.2	0.2	-0.0
				Earthquake X Mode 8	0.0	-0.2	-0.5	-0.1	-0.4	0.0	0.0	0.1	0.4	-0.1	-0.4	0.0
				Earthquake X Mode 9	0.0	-1.4	0.2	-1.0	0.2	0.0	0.0	1.0	-0.2	-1.0	0.2	0.0
				Earthquake Y Mode 1	-1.5	1.6	1.2	0.9	0.7	-0.0	-1.5	-0.6	-0.6	0.9	0.7	-0.0
				Earthquake Y Mode 2	1.4	9.7	-1.1	5.1	-0.5	-0.0	1.4	-3.1	0.2	5.1	-0.5	-0.0
				Earthquake Y Mode 3	79.3	-11.9	-32.6	-6.5	-18.1	0.1	79.3	4.3	12.5	-6.5	-18.1	0.1
				Earthquake Y Mode 4	0.1	0.1	0.1	0.1	0.1	-0.0	0.1	-0.1	-0.1	0.1	0.1	-0.0
				Earthquake Y Mode 5	0.1	0.8	-0.0	0.5	0.0	-0.0	0.1	-0.4	-0.0	0.5	0.0	-0.0
				Earthquake Y Mode 6	-3.5	-1.0	-4.5	-0.6	-2.7	0.0	-3.5	0.5	2.2	-0.6	-2.7	0.0
				Earthquake Y Mode 7	-0.0	0.1	0.1	0.0	0.1	-0.0	-0.0	-0.0	-0.1	0.0	0.1	-0.0
				Earthquake Y Mode 8	0.0	-0.5	-1.3	-0.3	-0.9	0.0	0.0	0.3	0.9	-0.3	-0.9	0.0
				Earthquake Y Mode 9	0.0	-0.5	0.1	-0.4	0.1	0.0	0.0	0.4	-0.1	-0.4	0.1	0.0
C28	techo	50x50	12.00/14.50	Self weight	125.9	-2.5	-18.6	-1.9	-13.1	0.0	110.6	2.1	14.1	-1.9	-13.1	0.0
				Dead load	85.9	-0.3	-11.4	-0.2	-10.1	-0.0	85.9	0.3	13.8	-0.2	-10.1	-0.0
				Live load	23.2	-1.1	-7.9	-0.9	-4.7	0.0	23.2	1.1	3.9	-0.9	-4.7	0.0
				Wind +X ecc.+	-0.0	-0.6	0.1	-0.5	0.0	0.0	-0.0	0.6	-0.0	-0.5	0.0	0.0
				Wind +X ecc.-	0.0	-0.5	-0.0	-0.4	-0.0	-0.0	0.0	0.5	0.0	-0.4	-0.0	-0.0
				Wind -X ecc.+	0.0	0.6	-0.1	0.5	-0.0	-0.0	0.0	-0.6	0.0	0.5	-0.0	-0.0
				Wind -X ecc.-	-0.0	0.5	0.0	0.4	0.0	-0.0	-0.0	-0.5	-0.0	0.4	0.0	0.0
				Wind +Y ecc.+	0.6	0.5	-1.4	0.4	-1.1	-0.0	0.6	-0.5	1.3	0.4	-1.1	-0.0
				Wind +Y ecc.-	0.4	-0.0	-0.9	-0.1	-0.8	0.0	0.4	0.1	1.0	-0.1	-0.8	0.0
				Wind -Y ecc.+	-0.6	-0.5	1.4	-0.4	1.1	0.0	-0.6	0.5	-1.3	-0.4	1.1	0.0
				Wind -Y ecc.-	-0.4	0.0	0.9	0.1	0.8	-0.0	-0.4	-0.1	-1.0	0.1	0.8	-0.0
				Earthquake X Mode 1	1.2	1.0	-2.8	0.8	-2.2	-0.1	1.2	-0.9	2.6	0.8	-2.2	-0.1
				Earthquake X Mode 2	2.1	11.8	-4.6	9.1	-3.4	-0.1	2.1	-11.0	3.9	9.1	-3.4	-0.1
				Earthquake X Mode 3	0.4	-0.5	-1.1	-0.4	-0.8	0.0	0.4	0.5	1.0	-0.4	-0.8	0.0
				Earthquake X Mode 4	-0.2	-0.4	0.6	-0.2	0.4	0.0	-0.2	0.2	-0.4	-0.2	0.4	0.0
				Earthquake X Mode 5	-0.4	-3.6	0.9	-2.4	0.6	0.0	-0.4	2.4	-0.6	-2.4	0.6	0.0
				Earthquake X Mode 6	-0.1	0.1	0.3	0.0	0.2	-0.0	-0.1	-0.0	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 7	0.0	0.2	-0.1	0.1	-0.0	-0.0	0.0	-0.1	0.0	0.1	-0.0	-0.0
				Earthquake X Mode 8	0.1	-0.2	-0.5	-0.1	-0.3	-0.0	0.1	0.1	0.2	-0.1	-0.3	-0.0
				Earthquake X Mode 9	-0.1	-1.5	0.6	-0.8	0.3	0.0	-0.1	0.6	-0.2	-0.8	0.3	0.0
				Earthquake Y Mode 1	0.6	0.5	-1.3	0.3	-1.0	-0.0	0.6	-0.4	1.2	0.3	-1.0	-0.0
				Earthquake Y Mode 2	0.7	3.6	-1.4	2.8	-1.0	-0.0	0.7	-3.4	1.2	2.8	-1.0	-0.0
				Earthquake Y Mode 3	2.6	-2.9	-6.5	-2.3	-5.1	0.0	2.6	2.8	6.3	-2.3	-5.1	0.0
				Earthquake Y Mode 4	-0.0	-0.1	0.1	-0.0	0.1	0.0	-0.0	0.0	-0.1	-0.0	0.1	0.0
				Earthquake Y Mode 5	-0.1	-0.7	0.2	-0.4	0.1	0.0	-0.1	0.4	-0.1	-0.4	0.1	0.0
				Earthquake Y Mode 6	-0.9	0.5	2.7	0.4	1.8	-0.0	-0.9	-0.4	-1.8	0.4	1.8	-0.0
				Earthquake Y Mode 7	0.0	0.1	-0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0
				Earthquake Y Mode 8	0.3	-0.5	-1.3	-0.3	-0.7	-0.0	0.3	0.2	0.5	-0.3	-0.7	-0.0
				Earthquake Y Mode 9	-0.0	-0.5	0.2	-0.3	0.1	0.0	-0.0	0.2	-0.1	-0.3	0.1	0.0
	Floor 4	50x50	9.00/11.50	Self weight	255.5	-1.3	-15.5	-1.0	-12.2	0.0	240.2	1.1	14.9	-1.0	-12.2	0.0
				Dead load	129.7	-0.4	-2.2	-0.3	-0.9	-0.0	129.7	0.5	0.0	-0.3	-0.9	-0.0
				Live load	80.2	-0.6	-10.2	-0.5	-8.4	0.0	80.2	0.6	10.7	-0.5	-8.4	0.0
				Wind +X ecc.+	-0.1	-1.0	0.1	-0.9	0.1	0.0	-0.1	1.4	-0.1	-0.9	0.1	0.0
				Wind +X ecc.-	0.0	-0.8	-0.1	-0.7	-0.1	-0.0	0.0	1.1	0.1	-0.7	-0.1	-0.0
				Wind -X ecc.+	0.1	1.0	-0.1	0.9	-0.1	-0.0	0.1	-1.4	0.1	0.9	-0.1	-0.0
				Wind -X ecc.-	-0.0	0.8	0.1	0.7	0.1	0.0	-0.0	-1.1	-0.1	0.7	0.1	0.0
				Wind +Y ecc.+	2.9	0.7	-2.5	0.6	-2.3	-0.0	2.9	-0.9	3.4	0.6	-2.3	-0.0
				Wind +Y ecc.-	2.1	-0.2	-1.8	-0.3	-1.7	0.0	2.1	0.4	2.5	-0.3	-1.7	0.0
				Wind -Y ecc.+	-2.9	-0.7	2.5	-0.6	2.3	0.0	-2.9	0.9	-3.4	-0.6	2.3	0.0
				Wind -Y ecc.-	-2.1	0.2	1.8	0.3	1.7	-0.0	-2.1	-0.4	-2.5	0.3	1.7	-0.0
				Earthquake X Mode 1	5.6	1.6	-4.8	1.5	-4.4	-0.1	5.6	-2.1	6.1	1.5	-4.4	-0.1
				Earthquake X Mode 2	9.1	17.5	-7.2	15.9	-6.4	-0.1	9.1	-22.3	8.9	15.9	-6.4	-0.1
				Earthquake X Mode 3	2.2	-0.8	-2.0	-0.7	-1.8	0.0	2.2	1.0	2.6	-0.7	-1.8	0.0
				Earthquake X Mode 4	-0.7	-0.5	0.7	-0.3	0.4	0.0	-0.7	0.3	-0.4	-0.3	0.4	0.0
				Earthquake X Mode 5	-1.2	-4.1	1.1	-2.6	0.7	0.0	-1.2	2.4	-0.7	-2.6	0.7	0.0
				Earthquake X Mode 6	-0.4	0.1	0.4	0.1	0.3	-0.0	-0.4	-0.1	-0.3	0.1	0.3	-0.0
				Earthquake X Mode 7	0.0	0.1	0.0	-0.0	0.0	0.0	0.0	0.1	-0.0	-0.0	0.0	0.0
				Earthquake X Mode 8	0.2	-0.0	-0.1	0.0	0.0	0.0	0.2	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	-0.2	-0.2	0.1	0.2	-0.1	-0.0	-0.2	-0.7	0.2	0.2	-0.1	-0.0
				Earthquake Y Mode 1	2.5	0.7	-2.2	0.7	-2.0	-0.1	2.5	-1.0	2.8	0.7	-2.0	-0.1
				Earthquake Y Mode 2	2.8	5.4	-2.2	4.9	-2.0	-0.0	2.8	-6.9	2.7	4.9	-2.0	-0.0
				Earthquake Y Mode 3	13.3	-4.7</										



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
Floor 3	50x50	6.00/8.50	Self weight	384.4	-1.2	-15.6	-1.0	-12.8	0.0	369.1	1.3	16.4	-1.0	-12.8	0.0	
				Dead load	172.3	-0.2	-3.8	-0.2	-3.2	-0.0	172.3	0.3	4.2	-0.2	-3.2	-0.0
				Live load	137.2	-0.6	-9.3	-0.5	-7.5	0.0	137.2	0.6	9.5	-0.5	-7.5	0.0
				Wind +X ecc.+	-0.2	-1.4	0.1	-1.2	0.1	0.0	-0.2	1.7	-0.1	-1.2	0.1	0.0
				Wind +X ecc.-	0.1	-1.1	-0.1	-1.0	-0.1	-0.0	0.1	1.3	0.2	-1.0	-0.1	-0.0
				Wind -X ecc.+	0.2	1.4	-0.1	1.2	-0.1	-0.0	0.2	-1.7	0.1	1.2	-0.1	-0.0
				Wind -X ecc.-	-0.1	1.1	0.1	1.0	0.1	0.0	-0.1	-1.3	-0.2	1.0	0.1	0.0
				Wind +Y ecc.+	6.1	0.9	-3.5	0.8	-3.1	-0.0	6.1	-1.0	4.2	0.8	-3.1	-0.0
				Wind +Y ecc.-	4.4	-0.4	-2.6	-0.4	-2.3	0.0	4.4	0.6	3.1	-0.4	-2.3	0.0
				Wind -Y ecc.+	-6.1	-0.9	3.5	-0.8	3.1	0.0	-6.1	1.0	-4.2	-0.8	3.1	0.0
				Wind -Y ecc.-	-4.4	0.4	2.6	0.4	2.3	-0.0	-4.4	-0.6	-3.1	0.4	2.3	-0.0
				Earthquake X Mode 1	11.1	2.1	-6.4	1.8	-5.2	-0.2	11.1	-2.3	6.8	1.8	-5.2	-0.2
				Earthquake X Mode 2	17.5	23.0	-9.0	19.2	-7.5	-0.1	17.5	-24.9	9.6	19.2	-7.5	-0.1
				Earthquake X Mode 3	4.5	-1.1	-2.6	-0.9	-2.2	0.0	4.5	1.2	2.9	-0.9	-2.2	0.0
				Earthquake X Mode 4	-0.9	-0.3	0.3	-0.1	0.1	0.0	-0.9	-0.1	0.1	-0.1	0.1	0.0
				Earthquake X Mode 5	-1.7	-2.0	0.5	-0.5	0.2	0.0	-1.7	-0.7	0.1	-0.5	0.2	0.0
				Earthquake X Mode 6	-0.6	0.1	0.2	0.0	0.1	-0.0	-0.6	0.0	0.0	0.0	0.1	-0.0
				Earthquake X Mode 7	-0.0	-0.2	0.1	-0.2	0.0	0.0	-0.0	0.2	-0.0	-0.2	0.0	0.0
				Earthquake X Mode 8	0.0	0.2	0.5	0.1	0.4	0.0	0.0	-0.2	-0.4	0.1	0.4	0.0
				Earthquake X Mode 9	-0.0	1.3	-0.5	1.0	-0.4	-0.0	-0.0	-1.1	0.5	1.0	-0.4	-0.0
				Earthquake Y Mode 1	5.0	0.9	-2.9	0.8	-2.4	-0.1	5.0	-1.1	3.1	0.8	-2.4	-0.1
				Earthquake Y Mode 2	5.4	7.1	-2.8	5.9	-2.3	-0.0	5.4	-7.7	3.0	5.9	-2.3	-0.0
				Earthquake Y Mode 3	27.5	-6.5	-16.3	-5.6	-13.7	0.1	27.5	7.5	18.1	-5.6	-13.7	0.1
				Earthquake Y Mode 4	-0.2	-0.0	0.1	-0.0	0.0	0.0	-0.2	-0.0	0.0	-0.0	0.0	0.0
				Earthquake Y Mode 5	-0.3	-0.4	0.1	-0.1	0.0	0.0	-0.3	-0.1	0.0	-0.1	0.0	0.0
				Earthquake Y Mode 6	-4.6	0.4	1.8	0.2	0.6	-0.0	-4.6	0.0	0.4	0.2	0.6	-0.0
				Earthquake Y Mode 7	-0.0	-0.1	0.0	-0.0	0.0	0.0	-0.0	0.1	-0.0	-0.0	0.0	0.0
				Earthquake Y Mode 8	0.1	0.4	1.2	0.3	0.9	0.0	0.1	-0.4	-1.1	0.3	0.9	0.0
				Earthquake Y Mode 9	-0.0	0.5	-0.2	0.4	-0.1	-0.0	-0.0	-0.4	0.2	0.4	-0.1	-0.0
Floor 2	50x50	3.00/5.50	Self weight	513.1	-0.6	-17.5	-0.5	-13.6	0.0	497.8	0.7	16.5	-0.5	-13.6	0.0	
				Dead load	214.7	-0.1	-3.4	-0.1	-2.6	0.0	214.7	0.2	3.0	-0.1	-2.6	0.0
				Live load	194.0	-0.3	-10.6	-0.2	-8.3	0.0	194.0	0.3	10.0	-0.2	-8.3	0.0
				Wind +X ecc.+	-0.3	-1.9	0.1	-1.5	0.1	0.0	-0.3	1.7	-0.1	-1.5	0.1	0.0
				Wind +X ecc.-	0.2	-1.5	-0.2	-1.1	-0.1	-0.0	0.2	1.3	0.2	-1.1	-0.1	-0.0
				Wind -X ecc.+	0.3	1.9	-0.1	1.5	-0.1	-0.0	0.3	-1.7	0.1	1.5	-0.1	-0.0
				Wind -X ecc.-	-0.2	1.5	0.2	1.1	0.1	0.0	-0.2	-1.3	-0.2	1.1	0.1	0.0
				Wind +Y ecc.+	9.9	1.2	-4.7	0.9	-3.7	-0.0	9.9	-1.0	4.4	0.9	-3.7	-0.0
				Wind +Y ecc.-	7.3	-0.7	-3.5	-0.6	-2.7	0.0	7.3	0.8	3.4	-0.6	-2.7	0.0
				Wind -Y ecc.+	-9.9	-1.2	4.7	-0.9	3.7	0.0	-9.9	1.0	-4.4	-0.9	3.7	0.0
				Wind -Y ecc.-	-7.3	0.7	3.5	0.6	2.7	-0.0	-7.3	-0.8	-3.4	0.6	2.7	-0.0
				Earthquake X Mode 1	17.0	2.5	-7.6	1.9	-5.5	-0.2	17.0	-2.3	6.1	1.9	-5.5	-0.2
				Earthquake X Mode 2	26.4	27.4	-10.3	20.0	-7.6	-0.1	26.4	-22.7	8.8	20.0	-7.6	-0.1
				Earthquake X Mode 3	7.1	-1.3	-3.2	-1.0	-2.4	0.0	7.1	1.2	2.8	-1.0	-2.4	0.0
				Earthquake X Mode 4	-0.7	0.1	-0.3	0.2	-0.3	-0.0	-0.7	-0.3	0.5	0.2	-0.3	-0.0
				Earthquake X Mode 5	-1.5	1.6	-0.4	1.8	-0.5	-0.0	-1.5	-3.0	0.7	1.8	-0.5	-0.0
				Earthquake X Mode 6	-0.5	-0.0	-0.1	-0.0	-0.2	0.0	-0.5	0.1	0.3	-0.0	-0.2	0.0
				Earthquake X Mode 7	-0.0	-0.1	0.0	-0.0	-0.0	0.0	-0.0	-0.0	0.0	-0.0	-0.0	0.0
				Earthquake X Mode 8	-0.1	0.1	0.2	0.0	0.0	-0.0	-0.1	0.0	0.1	0.0	0.0	-0.0
				Earthquake X Mode 9	0.1	0.5	-0.2	0.1	-0.0	-0.0	0.1	0.4	-0.1	0.1	-0.0	-0.0
				Earthquake Y Mode 1	7.7	1.1	-3.4	0.9	-2.5	-0.1	7.7	-1.0	2.8	0.9	-2.5	-0.1
				Earthquake Y Mode 2	8.2	8.5	-3.2	6.2	-2.4	-0.0	8.2	-7.0	2.7	6.2	-2.4	-0.0
				Earthquake Y Mode 3	43.5	-8.1	-19.8	-6.3	-14.9	0.1	43.5	7.6	17.5	-6.3	-14.9	0.1
				Earthquake Y Mode 4	-0.1	0.0	-0.1	0.0	-0.1	-0.0	-0.1	-0.1	0.1	0.0	-0.1	-0.0
				Earthquake Y Mode 5	-0.3	0.3	-0.1	0.3	-0.1	-0.0	-0.3	-0.6	0.1	0.3	-0.1	-0.0
				Earthquake Y Mode 6	-4.0	-0.2	-1.2	-0.3	-1.5	0.0	-4.0	0.5	2.6	-0.3	-1.5	0.0
				Earthquake Y Mode 7	-0.0	-0.0	0.0	-0.0	-0.0	0.0	-0.0	-0.0	0.0	-0.0	-0.0	0.0
				Earthquake Y Mode 8	-0.3	0.2	0.6	0.1	0.1	-0.0	-0.3	0.1	0.3	0.1	0.1	-0.0
				Earthquake Y Mode 9	0.0	0.2	-0.1	0.0	-0.0	-0.0	0.0	0.1	-0.0	0.0	-0.0	-0.0
Floor 1	50x50	0.00/2.50	Self weight	640.7	-0.3	-8.7	-0.1	-9.2	0.0	625.4	-0.0	14.4	-0.1	-9.2	0.0	
				Dead load	256.3	-0.1	-1.7	-0.0	-1.7	0.0	256.3	0.0	2.5	-0.0	-1.7	0.0
				Live load	250.1	-0.2	-5.2	-0.0	-5.5	0.0	250.1	-0.0	8.6	-0.0	-5.5	0.0
				Wind +X ecc.+	-0.4	-2.5	0.0	-1.4	0.0	0.0	-0.4	0.9	-0.0	-1.4	0.0	0.0
				Wind +X ecc.-	0.3	-2.0	-0.2	-1.1	-0.1	-0.0	0.3	0.7	0.0	-1.1	-0.1	-0.0
				Wind -X ecc.+	0.4	2.5	-0.0	1.4	-0.0	-0.0	0.4	-0.9	0.0	1.4	-0.0	-0.0
				Wind -X ecc.-	-0.3	2.0	0.2	1.1	0.1	0.0	-0.3	-0.7	-0.0	1.1	0.1	0.0
				Wind +Y ecc.+	13.5	1.2	-6.5	0.6	-3.6	-0.0	13.5	-0.3	2.5	0.6	-3.6	-0.0
				Wind +Y ecc.-	10.0	-1.5	-5.3	-0.9	-3.0	0.0	10.0	0.7	2.1	-0.9	-3.0	0.0
				Wind -Y ecc.+	-13.5	-1.2	6.5	-0.6	3.6	0.0	-13.5	0.3	-2.5	-0.6	3.6	0.0
				Wind -Y ecc.-	-10.0	1.5	5.3	0.9	3.0	-0.0	-10.0	-0.7	-2.1	0.9	3.0	-0.0
				Earthquake X Mode 1	21.5	3.5	-7.5	1.9	-3.9	-0.1	21.5	-1.2	2.3	1.9	-3.9	-0.1
				Earthquake X Mode 2	33.5	31.4	-10.8	16.5	-5.9	-0.1	33.5	-9.8	4.0	16.5	-5.9	-0.1
				Earthquake X Mode 3	9.3	-2.0	-4.1	-1.1	-2.3	0.0	9.3	0.8	1.5	-1.1	-2.3	0.0
				Earthquake X Mode 4	-0.4	0.6	-0.7	0.3	-0.4	-0.0	-0.4	-0.3	0.3	0.3	-0.4	-0.0
				Earthquake X Mode 5	-0.9	4.6	-1.1	2.7	-0.6	-0.0	-0.9	-2.2	0.5	2.7	-0.6	-0.0
				Earthquake X Mode 6	-0.3	-0.1	-0.5	-0.1	-0.3	0.0	-0.3	0.1	0.3	-0.1	-0.3	0.0
				Earthquake X Mode 7	-0.0	0.2	-0.1	0.2	-0.0	-0.0	-0.0	-0.2	0.0	0.2	-0.0	-0.0
				Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0	-0.0	0.1	0.4	-0.1	-0.4	0.0
				Earthquake X Mode 9	-0.0	-1.4	0.5	-1.0	0.4	0.0	-0.0	1.0	-0.4	-1.0	0.4	0.0
				Earthquake Y Mode 1	9.8	1.6	-3.4	0.9	-1.8	-0.0	9.8	-0.6	1.0	0.9	-1.8	-0.0
				Earthquake Y Mode 2	10.3	9.7	-3.3	5.1	-1.8	-0.0	10.3	-3.0	1.2	5.1	-1.8	-0.0



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
C29	techo	50x50	12.00/14.50	Self weight	122.2	1.7	-14.2	1.8	-9.8	0.0	106.9	-2.7	10.3	1.8	-9.8	0.0
				Dead load	82.3	2.2	-8.2	2.1	-7.1	-0.0	82.3	-3.1	9.6	2.1	-7.1	-0.0
				Live load	21.4	0.5	-6.1	0.4	-3.5	0.0	21.4	-0.4	2.8	0.4	-3.5	0.0
				Wind +X ecc.+	0.1	-0.6	-0.1	-0.5	-0.0	0.0	0.1	0.6	0.1	-0.5	-0.0	0.0
				Wind +X ecc.-	0.2	-0.5	-0.3	-0.4	-0.2	-0.0	0.2	0.5	0.2	-0.4	-0.2	-0.0
				Wind -X ecc.+	-0.1	0.6	0.1	0.5	0.0	-0.0	-0.1	-0.6	-0.1	0.5	0.0	-0.0
				Wind -X ecc.-	-0.2	0.5	0.3	0.4	0.2	0.0	-0.2	-0.5	-0.2	0.4	0.2	0.0
				Wind +Y ecc.+	1.1	0.8	-1.9	0.6	-1.4	-0.0	1.1	-0.7	1.7	0.6	-1.4	-0.0
				Wind +Y ecc.-	0.5	0.0	-1.0	-0.0	-0.7	0.0	0.5	0.0	0.9	-0.0	-0.7	0.0
				Wind -Y ecc.+	-1.1	-0.8	1.9	-0.6	1.4	0.0	-1.1	0.7	-1.7	-0.6	1.4	0.0
				Wind -Y ecc.-	-0.5	-0.0	1.0	0.0	0.7	-0.0	-0.5	-0.0	-0.9	0.0	0.7	-0.0
				Earthquake X Mode 1	3.9	2.1	-6.3	1.5	-4.8	-0.1	3.9	-1.8	5.7	1.5	-4.8	-0.1
				Earthquake X Mode 2	2.8	12.7	-5.3	9.8	-4.0	-0.1	2.8	-11.7	4.6	9.8	-4.0	-0.1
				Earthquake X Mode 3	0.6	-0.4	-1.0	-0.3	-0.8	0.0	0.6	0.4	0.9	-0.3	-0.8	0.0
				Earthquake X Mode 4	-0.8	-0.6	1.7	-0.4	1.1	0.0	-0.8	0.4	-1.1	-0.4	1.1	0.0
				Earthquake X Mode 5	-0.6	-3.8	1.5	-2.6	1.0	0.0	-0.6	2.6	-0.9	-2.6	1.0	0.0
				Earthquake X Mode 6	-0.2	0.0	0.3	0.0	0.2	-0.0	-0.2	-0.0	-0.2	0.0	0.2	-0.0
				Earthquake X Mode 7	0.2	0.3	-0.5	0.2	-0.3	-0.0	0.2	-0.1	0.2	0.2	-0.3	-0.0
				Earthquake X Mode 8	0.2	-0.2	-0.5	-0.1	-0.3	-0.0	0.2	0.0	0.2	-0.1	-0.3	-0.0
				Earthquake X Mode 9	-0.3	-1.5	0.9	-0.9	0.5	0.0	-0.3	0.6	-0.3	-0.9	0.5	0.0
				Earthquake Y Mode 1	1.8	1.0	-2.9	0.7	-2.2	-0.0	1.8	-0.8	2.6	0.7	-2.2	-0.0
				Earthquake Y Mode 2	0.9	3.9	-1.6	3.0	-1.2	-0.0	0.9	-3.6	1.4	3.0	-1.2	-0.0
				Earthquake Y Mode 3	3.6	-2.4	-6.3	-2.0	-4.8	0.0	3.6	2.5	5.7	-2.0	-4.8	0.0
				Earthquake Y Mode 4	-0.2	-0.1	0.3	-0.1	0.2	0.0	-0.2	0.1	-0.2	-0.1	0.2	0.0
				Earthquake Y Mode 5	-0.1	-0.7	0.3	-0.5	0.2	0.0	-0.1	0.5	-0.2	-0.5	0.2	0.0
				Earthquake Y Mode 6	-1.3	0.3	2.8	0.2	1.8	-0.0	-1.3	-0.2	-1.8	0.2	1.8	-0.0
				Earthquake Y Mode 7	0.1	0.1	-0.2	0.0	-0.1	-0.0	0.1	-0.0	0.1	0.0	-0.1	-0.0
				Earthquake Y Mode 8	0.4	-0.4	-1.4	-0.2	-0.8	-0.0	0.4	0.1	0.6	-0.2	-0.8	-0.0
				Earthquake Y Mode 9	-0.1	-0.6	0.3	-0.3	0.2	0.0	-0.1	0.2	-0.1	-0.3	0.2	0.0
	Floor 4	50x50	9.00/11.50	Self weight	246.7	0.2	-12.8	-0.1	-10.2	0.0	231.4	0.4	12.6	-0.1	-10.2	0.0
				Dead load	124.0	-0.1	-1.3	-0.4	-0.5	-0.0	124.0	1.0	-0.1	-0.4	-0.5	-0.0
				Live load	75.5	0.4	-8.3	0.3	-6.8	0.0	75.5	-0.4	8.8	0.3	-6.8	0.0
				Wind +X ecc.+	0.1	-1.0	-0.0	-0.9	-0.0	0.0	0.1	1.4	0.0	-0.9	-0.0	0.0
				Wind +X ecc.-	0.6	-0.7	-0.4	-0.7	-0.4	-0.0	0.6	1.0	0.5	-0.7	-0.4	-0.0
				Wind -X ecc.+	-0.1	1.0	0.0	0.9	0.0	-0.0	-0.1	-1.4	-0.0	0.9	0.0	-0.0
				Wind -X ecc.-	-0.6	0.7	0.4	0.7	0.4	0.0	-0.6	-1.0	-0.5	0.7	0.4	0.0
				Wind +Y ecc.+	4.6	1.0	-3.3	0.9	-3.1	-0.0	4.6	-1.2	4.5	0.9	-3.1	-0.0
				Wind +Y ecc.-	2.2	-0.1	-1.7	-0.2	-1.5	0.0	2.2	0.3	2.2	-0.2	-1.5	0.0
				Wind -Y ecc.+	-4.6	-1.0	3.3	-0.9	3.1	0.0	-4.6	1.2	-4.5	-0.9	3.1	0.0
				Wind -Y ecc.-	-2.2	0.1	1.7	0.2	1.5	-0.0	-2.2	-0.3	-2.2	0.2	1.5	-0.0
				Earthquake X Mode 1	14.8	2.8	-10.7	2.4	-9.7	-0.1	14.8	-3.1	13.5	2.4	-9.7	-0.1
				Earthquake X Mode 2	12.4	18.5	-9.7	16.7	-8.8	-0.1	12.4	-23.2	12.3	16.7	-8.8	-0.1
				Earthquake X Mode 3	2.3	-0.7	-1.8	-0.6	-1.6	0.0	2.3	0.9	2.3	-0.6	-1.6	0.0
				Earthquake X Mode 4	-2.4	-0.6	2.0	-0.4	1.3	0.0	-2.4	0.4	-1.3	-0.4	1.3	0.0
				Earthquake X Mode 5	-2.1	-4.2	1.8	-2.7	1.2	0.0	-2.1	2.5	-1.1	-2.7	1.2	0.0
				Earthquake X Mode 6	-0.5	0.1	0.4	0.0	0.3	-0.0	-0.5	-0.0	-0.3	0.0	0.3	-0.0
				Earthquake X Mode 7	0.3	0.0	-0.1	-0.0	0.1	0.0	0.3	0.1	-0.2	-0.0	0.1	0.0
				Earthquake X Mode 8	0.3	-0.1	-0.1	0.0	0.0	0.0	0.3	-0.1	-0.2	0.0	0.0	0.0
				Earthquake X Mode 9	-0.4	-0.2	0.1	0.2	-0.1	-0.0	-0.4	-0.7	0.4	0.2	-0.1	-0.0
				Earthquake Y Mode 1	6.7	1.3	-4.9	1.1	-4.4	-0.1	6.7	-1.4	6.1	1.1	-4.4	-0.1
				Earthquake Y Mode 2	3.8	5.7	-3.0	5.2	-2.7	-0.0	3.8	-7.2	3.8	5.2	-2.7	-0.0
				Earthquake Y Mode 3	14.5	-4.1	-11.1	-3.9	-10.0	0.1	14.5	5.8	13.9	-3.9	-10.0	0.1
				Earthquake Y Mode 4	-0.5	-0.1	0.4	-0.1	0.3	0.0	-0.5	0.1	-0.3	-0.1	0.3	0.0
				Earthquake Y Mode 5	-0.4	-0.8	0.3	-0.5	0.2	0.0	-0.4	0.5	-0.2	-0.5	0.2	0.0
				Earthquake Y Mode 6	-4.0	0.6	3.5	0.4	2.3	-0.0	-4.0	-0.3	-2.3	0.4	2.3	-0.0
				Earthquake Y Mode 7	0.1	0.0	-0.0	-0.0	0.0	0.0	0.1	0.0	-0.1	-0.0	0.0	0.0
				Earthquake Y Mode 8	0.8	-0.2	-0.3	0.0	0.1	0.0	0.8	-0.2	-0.6	0.0	0.1	0.0
				Earthquake Y Mode 9	-0.2	-0.1	0.0	0.1	-0.0	-0.0	-0.2	-0.3	0.1	0.1	-0.0	-0.0
	Floor 3	50x50	6.00/8.50	Self weight	371.4	0.7	-12.9	0.6	-10.6	0.0	356.1	-0.9	13.5	0.6	-10.6	0.0
				Dead load	164.8	0.5	-2.4	0.4	-2.0	-0.0	164.8	-0.7	2.6	0.4	-2.0	-0.0
				Live load	130.1	0.4	-7.7	0.3	-6.2	0.0	130.1	-0.4	7.9	0.3	-6.2	0.0
				Wind +X ecc.+	0.2	-1.4	-0.1	-1.2	-0.1	0.0	0.2	1.7	0.1	-1.2	-0.1	0.0
				Wind +X ecc.-	1.2	-1.1	-0.6	-0.9	-0.5	-0.0	1.2	1.3	0.7	-0.9	-0.5	-0.0
				Wind -X ecc.+	-0.2	1.4	0.1	1.2	0.1	-0.0	-0.2	-1.7	-0.1	1.2	0.1	-0.0
				Wind -X ecc.-	-1.2	1.1	0.6	0.9	0.5	0.0	-1.2	-1.3	-0.7	0.9	0.5	0.0
				Wind +Y ecc.+	9.3	1.4	-4.7	1.1	-4.1	-0.0	9.3	-1.5	5.5	1.1	-4.1	-0.0
				Wind +Y ecc.-	4.5	-0.3	-2.3	-0.3	-2.0	0.0	4.5	0.5	2.7	-0.3	-2.0	0.0
				Wind -Y ecc.+	-9.3	-1.4	4.7	-1.1	4.1	0.0	-9.3	1.5	-5.5	-1.1	4.1	0.0
				Wind -Y ecc.-	-4.5	0.3	2.3	0.3	2.0	-0.0	-4.5	-0.5	-2.7	0.3	2.0	-0.0
				Earthquake X Mode 1	28.9	3.6	-14.3	2.9	-11.8	-0.2	28.9	-3.8	15.3	2.9	-11.8	-0.2
				Earthquake X Mode 2	24.6	24.3	-12.6	20.2	-10.4	-0.1	24.6	-26.2	13.4	20.2	-10.4	-0.1
				Earthquake X Mode 3	4.6	-0.9	-2.4	-0.8	-2.0	0.0	4.6	1.1	2.5	-0.8	-2.0	0.0
				Earthquake X Mode 4	-3.3	-0.3	0.9	-0.1	0.3	0.0	-3.3	0.0	0.2	-0.1	0.3	0.0
				Earthquake X Mode 5	-2.7	-2.0	0.8	-0.5	0.2	0.0	-2.7	-0.6	0.4	-0.5	0.2	0.0
				Earthquake X Mode 6	-0.7	0.1	0.2	0.0	0.1	-0.0	-0.7	0.0	0.0	0.0	0.1	-0.0
				Earthquake X Mode 7	0.1	-0.2	0.5	-0.2	0.4	0.0	0.1	0.2	-0.4	-0.2	0.4	0.0
				Earthquake X Mode 8	0.1	0.1	0.5	0.1	0.4	0.0	0.1	-0.1	-0.5	0.1	0.4	0.0
				Earthquake X Mode 9	-0.1	1.4	-0.8	1.0	-0.6	-0.0	-0.1	-1.2	0.7	1.0	-0.6	-0.0
				Earthquake Y Mode 1	13.1	1.6	-6.5	1.3	-5.4	-0.1	13.1	-1.7	6.9	1.3	-5.4	-0.1
				Earthquake Y Mode 2	7.6	7.5	-3.9	6.2	-3.2	-0.0	7.6	-8.1	4.1	6.2	-3.2	-0.0
				Earthquake Y Mode 3												



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	50x50	3.00/5.50	Self weight	496.3	1.0	-14.5	0.7	-11.3	0.0	480.9	-0.7	13.8	0.7	-11.3	0.0
				Dead load	205.5	0.4	-2.4	0.3	-1.7	0.0	205.5	-0.2	2.0	0.3	-1.7	0.0
				Live load	184.6	0.6	-8.8	0.4	-6.9	0.0	184.6	-0.5	8.4	0.4	-6.9	0.0
				Wind +X ecc.+	0.3	-1.9	-0.1	-1.5	-0.0	0.0	0.3	1.7	0.1	-1.5	-0.0	0.0
				Wind +X ecc.-	2.0	-1.4	-0.8	-1.1	-0.6	-0.0	2.0	1.3	0.7	-1.1	-0.6	-0.0
				Wind -X ecc.+	-0.3	1.9	0.1	1.5	0.0	-0.0	-0.3	-1.7	-0.1	1.5	0.0	-0.0
				Wind -X ecc.-	-2.0	1.4	0.8	1.1	0.6	0.0	-2.0	-1.3	-0.7	1.1	0.6	0.0
				Wind +Y ecc.+	15.0	1.7	-6.3	1.3	-4.8	-0.0	15.0	-1.5	5.8	1.3	-4.8	-0.0
				Wind +Y ecc.-	7.2	-0.5	-3.0	-0.4	-2.3	0.0	7.2	0.6	2.8	-0.4	-2.3	0.0
				Wind -Y ecc.+	-15.0	-1.7	6.3	-1.3	4.8	0.0	-15.0	1.5	-5.8	-1.3	4.8	0.0
				Wind -Y ecc.-	-7.2	0.5	3.0	0.4	2.3	-0.0	-7.2	-0.6	-2.8	0.4	2.3	-0.0
				Earthquake X Mode 1	44.5	4.1	-17.0	3.2	-12.6	-0.2	44.5	-3.8	14.4	3.2	-12.6	-0.2
				Earthquake X Mode 2	38.0	28.9	-15.2	21.2	-11.1	-0.1	38.0	-24.1	12.6	21.2	-11.1	-0.1
				Earthquake X Mode 3	7.1	-1.2	-2.8	-0.9	-2.1	0.0	7.1	1.1	2.4	-0.9	-2.1	0.0
				Earthquake X Mode 4	-2.8	0.3	-0.8	0.3	-0.9	-0.0	-2.8	-0.4	1.5	0.3	-0.9	-0.0
				Earthquake X Mode 5	-2.3	1.7	-0.8	1.9	-0.9	-0.0	-2.3	-3.1	1.4	1.9	-0.9	-0.0
				Earthquake X Mode 6	-0.6	0.0	-0.2	-0.0	-0.2	0.0	-0.6	0.0	0.3	-0.0	-0.2	0.0
				Earthquake X Mode 7	-0.1	-0.1	0.2	-0.0	0.0	0.0	-0.1	-0.0	0.1	-0.0	0.0	0.0
				Earthquake X Mode 8	-0.1	0.1	0.2	0.0	0.0	-0.0	-0.1	0.0	0.1	0.0	0.0	-0.0
				Earthquake X Mode 9	0.2	0.5	-0.3	0.1	-0.0	-0.0	0.2	0.4	-0.2	0.1	-0.0	-0.0
				Earthquake Y Mode 1	20.2	1.9	-7.7	1.4	-5.7	-0.1	20.2	-1.7	6.5	1.4	-5.7	-0.1
				Earthquake Y Mode 2	11.7	8.9	-4.7	6.5	-3.4	-0.0	11.7	-7.4	3.9	6.5	-3.4	-0.0
				Earthquake Y Mode 3	43.9	-7.1	-17.2	-5.5	-12.7	0.1	43.9	6.6	14.7	-5.5	-12.7	0.1
				Earthquake Y Mode 4	-0.5	0.1	-0.2	0.1	-0.2	-0.0	-0.5	-0.1	0.3	0.1	-0.2	-0.0
				Earthquake Y Mode 5	-0.4	0.3	-0.1	0.3	-0.2	-0.0	-0.4	-0.6	0.3	0.3	-0.2	-0.0
				Earthquake Y Mode 6	-4.7	0.0	-1.4	-0.2	-1.6	0.0	-4.7	0.4	2.5	-0.2	-1.6	0.0
				Earthquake Y Mode 7	-0.0	-0.0	0.1	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0
				Earthquake Y Mode 8	-0.3	0.2	0.5	0.1	0.1	-0.0	-0.3	0.1	0.3	0.1	0.1	-0.0
				Earthquake Y Mode 9	0.1	0.2	-0.1	0.0	-0.0	-0.0	0.1	0.1	-0.1	0.0	-0.0	-0.0
	Floor 1	50x50	0.00/2.50	Self weight	620.5	0.4	-7.1	0.7	-7.6	0.0	605.2	-1.2	11.9	0.7	-7.6	0.0
				Dead load	246.2	0.2	-1.2	0.3	-1.2	0.0	246.2	-0.5	1.8	0.3	-1.2	0.0
				Live load	238.8	0.2	-4.3	0.4	-4.6	0.0	238.8	-0.7	7.2	0.4	-4.6	0.0
				Wind +X ecc.+	0.3	-2.6	-0.0	-1.4	-0.0	0.0	0.3	0.9	0.0	-1.4	-0.0	0.0
				Wind +X ecc.-	2.6	-1.9	-0.9	-1.0	-0.5	-0.0	2.6	0.6	0.4	-1.0	-0.5	-0.0
				Wind -X ecc.+	-0.3	2.6	0.0	1.4	0.0	-0.0	-0.3	-0.9	-0.0	1.4	0.0	-0.0
				Wind -X ecc.-	-2.6	1.9	0.9	1.0	0.5	0.0	-2.6	-0.6	-0.4	1.0	0.5	0.0
				Wind +Y ecc.+	20.1	1.5	-7.9	0.9	-4.4	-0.0	20.1	-0.8	3.2	0.9	-4.4	-0.0
				Wind +Y ecc.-	9.6	-1.4	-3.9	-0.8	-2.2	0.0	9.6	0.6	1.6	-0.8	-2.2	0.0
				Wind -Y ecc.+	-20.1	-1.5	7.9	-0.9	4.4	0.0	-20.1	0.8	-3.2	-0.9	4.4	0.0
				Wind -Y ecc.-	-9.6	1.4	3.9	0.8	2.2	-0.0	-9.6	-0.6	-1.6	0.8	2.2	-0.0
				Earthquake X Mode 1	57.3	4.2	-18.0	2.7	-9.9	-0.1	57.3	-2.5	6.6	2.7	-9.9	-0.1
				Earthquake X Mode 2	49.0	32.0	-16.8	17.2	-9.0	-0.1	49.0	-11.0	5.6	17.2	-9.0	-0.1
				Earthquake X Mode 3	9.2	-1.9	-3.0	-1.0	-1.7	0.0	9.2	0.6	1.2	-1.0	-1.7	0.0
				Earthquake X Mode 4	-1.7	0.7	-2.1	0.4	-1.3	-0.0	-1.7	-0.4	1.1	0.4	-1.3	-0.0
				Earthquake X Mode 5	-1.2	4.7	-2.1	2.8	-1.2	-0.0	-1.2	-2.3	1.0	2.8	-1.2	-0.0
Earthquake X Mode 6				-0.3	-0.1	-0.5	-0.1	-0.3	0.0	-0.3	0.0	0.2	-0.1	-0.3	0.0	
Earthquake X Mode 7				0.1	0.2	-0.5	0.2	-0.3	-0.0	0.1	-0.2	0.4	0.2	-0.3	-0.0	
Earthquake X Mode 8				0.0	-0.2	-0.5	-0.1	-0.4	0.0	0.0	0.1	0.4	-0.1	-0.4	0.0	
Earthquake X Mode 9				-0.0	-1.5	0.8	-1.0	0.6	0.0	-0.0	1.0	-0.6	-1.0	0.6	0.0	
Earthquake Y Mode 1				26.0	1.9	-8.2	1.2	-4.5	-0.0	26.0	-1.1	3.0	1.2	-4.5	-0.0	
Earthquake Y Mode 2				15.1	9.9	-5.2	5.3	-2.8	-0.0	15.1	-3.4	1.7	5.3	-2.8	-0.0	
Earthquake Y Mode 3				56.6	-11.6	-18.8	-6.2	-10.4	0.1	56.6	3.9	7.1	-6.2	-10.4	0.1	
Earthquake Y Mode 4				-0.3	0.1	-0.4	0.1	-0.2	-0.0	-0.3	-0.1	0.2	0.1	-0.2	-0.0	
Earthquake Y Mode 5				-0.2	0.9	-0.4	0.5	-0.2	-0.0	-0.2	-0.4	0.2	0.5	-0.2	-0.0	
Earthquake Y Mode 6				-2.8	-0.9	-3.7	-0.5	-2.3	0.0	-2.8	0.4	2.0	-0.5	-2.3	0.0	
Earthquake Y Mode 7	0.0	0.1	-0.1	0.1	-0.1	-0.0	0.0	-0.1	0.1	0.1	-0.1	-0.0				
Earthquake Y Mode 8	0.1	-0.5	-1.3	-0.3	-0.9	0.0	0.1	0.3	1.0	-0.3	-0.9	0.0				
Earthquake Y Mode 9	-0.0	-0.5	0.3	-0.4	0.2	0.0	-0.0	0.4	-0.2	-0.4	0.2	0.0				
C30	techo	50x50	12.00/14.50	Self weight	67.7	-36.1	-6.4	-26.8	-4.5	0.0	52.3	31.0	5.0	-26.8	-4.5	0.0
				Dead load	39.2	-22.6	-6.0	-19.3	-4.9	-0.0	39.2	25.7	6.3	-19.3	-4.9	-0.0
				Live load	9.6	-12.9	-2.0	-7.8	-1.1	0.0	9.6	6.7	0.7	-7.8	-1.1	0.0
				Wind +X ecc.+	0.1	-0.2	-0.1	-0.2	-0.1	0.0	0.1	0.4	0.0	-0.2	-0.1	0.0
				Wind +X ecc.-	0.3	-0.2	-0.3	-0.2	-0.3	-0.0	0.3	0.3	0.3	-0.2	-0.3	-0.0
				Wind -X ecc.+	-0.1	0.2	0.1	0.2	0.1	-0.0	-0.1	-0.4	-0.0	0.2	0.1	-0.0
				Wind -X ecc.-	-0.3	0.2	0.3	0.2	0.3	0.0	-0.3	-0.3	-0.3	0.2	0.3	0.0
				Wind +Y ecc.+	1.1	-0.2	-1.8	-0.1	-1.5	-0.0	1.1	-0.0	1.9	-0.1	-1.5	-0.0
				Wind +Y ecc.-	0.5	-0.1	-0.7	-0.1	-0.6	0.0	0.5	0.2	0.7	-0.1	-0.6	0.0
				Wind -Y ecc.+	-1.1	0.2	1.8	0.1	1.5	0.0	-1.1	0.0	-1.9	0.1	1.5	0.0
				Wind -Y ecc.-	-0.5	0.1	0.7	0.1	0.6	-0.0	-0.5	-0.2	-0.7	0.1	0.6	-0.0
				Earthquake X Mode 1	4.4	-0.8	-7.5	-0.4	-6.0	-0.1	4.4	0.3	7.5	-0.4	-6.0	-0.1
				Earthquake X Mode 2	2.1	3.0	-5.8	3.4	-4.7	-0.1	2.1	-5.7	6.1	3.4	-4.7	-0.1
				Earthquake X Mode 3	0.5	-0.3	-0.7	-0.3	-0.5	0.0	0.5	0.4	0.7	-0.3	-0.5	0.0
				Earthquake X Mode 4	-1.0	0.0	2.3	0.0	1.5	0.0	-1.0	-0.0	-1.5	0.0	1.5	0.0
				Earthquake X Mode 5	-0.5	-1.9	2.0	-1.3	1.3	0.0	-0.5	1.3	-1.3	-1.3	1.3	0.0
				Earthquake X Mode 6	-0.1	0.1	0.3	0.1	0.2	-0.0	-0.1	-0.1	-0.2	0.1	0.2	-0.0
				Earthquake X Mode 7	0.2	0.1	-0.9	0.1	-0.5	-0.0	0.2	-0.0	0.3	0.1	-0.5	-0.0
				Earthquake X Mode 8	0.2	-0.2	-0.5	-0.1	-0.3	-0.0	0.2	0.1	0.2	-0.1	-0.3	-0.0
				Earthquake X Mode 9	-0.2	-1.1	1.1	-0.6	0.6	0.0	-0.2	0.3	-0.4	-0.6	0.6	0.0
				Earthquake Y Mode 1	2.0	-0.3	-3.4	-0.2	-2.7	-0.0	2.0	0.1	3.4	-0.2	-2.7	-0.0
				Earthquake Y Mode 2	0.6	0.9	-1.8	1.1	-1.5	-0.0	0.6	-1.8	1.9	1.1	-1.5	-0.0
				Earthquake Y Mode 3	3.2	-1.9	-4.2	-1.8	-3.4	0.0	3.2	2.5	4.2	-1.8	-3.4	0.0
Earthquake Y Mode 4	-0.2	0.0	0.4	0.0	0.3	0.0	-0.2	-0.0	-0.3	0.0	0.3	0.0				
Earthquake Y Mode 5	-0.1	-0.4	0.4	-0.2	0.2	0.0	-0.1	0.2	-0.2	-0.2	0.2	0.0				
Earthquake Y Mode 6	-1.1	0.6	2.3	0.4	1.5	-0.0	-1.1	-0.5	-1.5	0.4	1.5	-0.0				
Earthquake Y Mode 7	0.1	0.0	-0.3	0.0	-0.1	-0.0	0.1	-0.0	0.1	0.0	-0.1	-0.0				
Earthquake Y Mode 8	0.4	-0.4	-1.3	-0.3	-0.7	-0.0	0.4	0.2	0.5	-0.3	-0.7	-0.0				
Earthquake Y Mode 9	-0.1	-0.4	0.4	-0.2	0.2	0.0	-0.1	0.1	-0.2	-0.2	0.2	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	50x50	0.00/2.50	Self weight	364.5	-15.6	-3.8	-16.7	-4.1	0.0	349.2	26.2	6.5	-16.7	-4.1	0.0
				Dead load	147.3	-6.2	-1.6	-6.7	-1.7	0.0	147.3	10.6	2.6	-6.7	-1.7	0.0
				Live load	119.7	-8.2	-2.0	-8.8	-2.2	0.0	119.7	13.8	3.5	-8.8	-2.2	0.0
				Wind +X ecc.+	1.7	-2.2	0.0	-1.0	0.0	0.0	1.7	0.3	0.0	-1.0	0.0	0.0
				Wind +X ecc.-	4.4	-1.7	-1.4	-0.8	-0.7	-0.0	4.4	0.3	0.5	-0.8	-0.7	-0.0
				Wind -X ecc.+	-1.7	2.2	-0.0	1.0	-0.0	-0.0	-1.7	-0.3	-0.0	1.0	-0.0	-0.0
				Wind -X ecc.-	-4.4	1.7	1.4	0.8	0.7	0.0	-4.4	-0.3	-0.5	0.8	0.7	0.0
				Wind +Y ecc.+	19.1	0.8	-8.7	0.2	-4.6	-0.0	19.1	0.4	2.8	0.2	-4.6	-0.0
				Wind +Y ecc.-	7.0	-1.4	-2.2	-0.8	-1.1	0.0	7.0	0.5	0.6	-0.8	-1.1	0.0
				Wind -Y ecc.+	-19.1	-0.8	8.7	-0.2	4.6	0.0	-19.1	-0.4	-2.8	-0.2	4.6	0.0
				Wind -Y ecc.-	-7.0	1.4	2.2	0.8	1.1	-0.0	-7.0	-0.5	-0.6	0.8	1.1	-0.0
				Earthquake X Mode 1	68.0	2.4	-26.7	0.6	-13.9	-0.1	68.0	0.8	7.9	0.6	-13.9	-0.1
				Earthquake X Mode 2	34.2	26.3	-22.2	10.9	-11.3	-0.1	34.2	-1.0	6.0	10.9	-11.3	-0.1
				Earthquake X Mode 3	7.1	-1.8	-1.8	-0.9	-0.9	0.0	7.1	0.4	0.4	-0.9	-0.9	0.0
				Earthquake X Mode 4	-2.0	0.4	-3.3	0.2	-2.0	-0.0	-2.0	-0.0	1.6	0.2	-2.0	-0.0
				Earthquake X Mode 5	-0.7	4.0	-3.0	2.0	-1.8	-0.0	-0.7	-1.1	1.4	2.0	-1.8	-0.0
				Earthquake X Mode 6	-0.3	-0.1	-0.4	-0.1	-0.2	0.0	-0.3	0.1	0.2	-0.1	-0.2	0.0
				Earthquake X Mode 7	0.1	0.2	-0.9	0.1	-0.6	-0.0	0.1	-0.1	0.6	0.1	-0.6	-0.0
				Earthquake X Mode 8	0.0	-0.2	-0.5	-0.1	-0.3	0.0	0.0	0.1	0.3	-0.1	-0.3	0.0
				Earthquake X Mode 9	-0.0	-1.3	1.1	-0.8	0.7	0.0	-0.0	0.7	-0.8	-0.8	0.7	0.0
				Earthquake Y Mode 1	30.9	1.1	-12.1	0.3	-6.3	-0.0	30.9	0.3	3.6	0.3	-6.3	-0.0
				Earthquake Y Mode 2	10.6	8.1	-6.9	3.4	-3.5	-0.0	10.6	-0.3	1.9	3.4	-3.5	-0.0
				Earthquake Y Mode 3	44.0	-10.9	-10.8	-5.4	-5.4	0.1	44.0	2.6	2.6	-5.4	-5.4	0.1
				Earthquake Y Mode 4	-0.4	0.1	-0.6	0.0	-0.4	-0.0	-0.4	-0.0	0.3	0.0	-0.4	-0.0
				Earthquake Y Mode 5	-0.1	0.7	-0.5	0.4	-0.3	-0.0	-0.1	-0.2	0.3	0.4	-0.3	-0.0
				Earthquake Y Mode 6	-2.3	-1.0	-3.1	-0.6	-1.8	0.0	-2.3	0.5	1.4	-0.6	-1.8	0.0
				Earthquake Y Mode 7	0.0	0.1	-0.3	0.0	-0.2	-0.0	0.0	-0.0	0.2	0.0	-0.2	-0.0
				Earthquake Y Mode 8	0.1	-0.5	-1.3	-0.3	-0.8	0.0	0.1	0.3	0.9	-0.3	-0.8	0.0
				Earthquake Y Mode 9	-0.0	-0.5	0.4	-0.3	0.3	0.0	-0.0	0.3	-0.3	-0.3	0.3	0.0
W1	techo	30.0	12.00/15.00	Self weight	170.5	-8.7	38.5	-6.0	31.0	-0.8	127.0	10.7	-55.5	-2.1	36.3	1.3
				Dead load	16.6	-7.4	4.7	-5.9	3.4	-0.2	13.8	9.5	-6.1	-3.6	5.1	-0.5
				Live load	14.3	-4.6	18.0	-2.7	13.4	-0.4	10.6	3.5	-23.4	-1.1	17.7	-0.5
				Wind +X ecc.+	-0.3	-2.7	0.1	1.3	0.1	0.1	0.1	-6.4	-0.2	-0.0	0.1	0.2
				Wind +X ecc.-	0.2	-3.1	-0.1	1.3	-0.1	0.1	0.6	-6.9	0.1	-0.1	-0.2	0.3
				Wind -X ecc.+	0.3	2.7	-0.1	-1.3	-0.1	-0.1	-0.1	6.4	0.2	0.0	-0.1	-0.2
				Wind -X ecc.-	-0.2	3.1	0.1	-1.3	0.1	-0.1	-0.6	6.9	-0.1	0.1	0.2	-0.3
				Wind +Y ecc.+	-3.8	-0.3	1.6	1.1	1.3	0.1	-3.6	-3.3	-2.4	0.4	1.9	0.0
				Wind +Y ecc.-	-6.1	1.2	2.7	0.7	2.1	-0.1	-6.1	-0.7	-4.0	0.6	3.2	-0.4
				Wind -Y ecc.+	3.8	0.3	-1.6	-1.1	-1.3	-0.1	3.6	3.3	2.4	-0.4	-1.9	-0.0
				Wind -Y ecc.-	6.1	-1.2	-2.7	-0.7	-2.1	0.1	6.1	0.7	4.0	-0.6	-3.2	0.4
				Earthquake X Mode 1	9.9	-12.0	-3.8	8.9	-3.0	1.4	12.1	-37.9	5.9	1.0	-5.1	2.7
				Earthquake X Mode 2	2.0	21.1	-1.5	-19.7	-1.2	-0.2	-2.3	78.0	2.1	-3.7	-1.0	-1.4
				Earthquake X Mode 3	-8.5	0.0	3.4	1.1	2.7	-0.2	-8.4	-3.1	-5.1	0.6	4.1	-0.4
				Earthquake X Mode 4	-6.7	-6.2	1.9	-5.3	1.5	-0.4	-7.0	9.1	-3.0	-3.1	2.5	-0.8
				Earthquake X Mode 5	-1.0	14.2	0.7	11.4	0.6	0.0	-0.2	-18.7	-1.0	7.0	0.7	0.3
				Earthquake X Mode 6	2.3	-0.2	-0.8	-0.2	-0.6	0.0	2.3	0.2	1.1	-0.1	-0.9	0.1
				Earthquake X Mode 7	3.0	5.3	-0.8	2.7	-0.6	0.1	3.1	-2.4	1.2	1.9	-1.0	0.2
				Earthquake X Mode 8	-2.2	2.7	0.7	1.2	0.5	-0.0	-2.2	-0.8	-1.0	1.0	0.8	-0.1
				Earthquake X Mode 9	0.9	12.9	-0.1	6.2	-0.1	0.0	0.9	-4.9	0.2	4.7	-0.2	0.1
				Earthquake Y Mode 1	4.5	-5.4	-1.7	4.1	-1.4	0.6	5.5	-17.2	2.7	0.5	-2.3	1.2
				Earthquake Y Mode 2	0.6	6.5	-0.5	-6.1	-0.4	-0.1	-0.7	24.1	0.6	-1.2	-0.3	-0.4
				Earthquake Y Mode 3	-52.5	0.2	21.2	6.6	16.5	-1.0	-51.8	-18.8	-31.3	3.5	25.2	-2.6
				Earthquake Y Mode 4	-1.3	-1.2	0.4	-1.0	0.3	-0.1	-1.4	1.8	-0.6	-0.6	0.5	-0.1
				Earthquake Y Mode 5	-0.2	2.6	0.1	2.1	0.1	0.0	-0.0	-3.4	-0.2	1.3	0.1	0.1
				Earthquake Y Mode 6	19.2	-1.9	-6.2	-1.3	-4.9	0.2	19.1	2.0	9.3	-1.1	-7.6	0.8
				Earthquake Y Mode 7	0.9	1.6	-0.2	0.8	-0.2	0.0	0.9	-0.7	0.4	0.6	-0.3	0.1
				Earthquake Y Mode 8	-5.6	6.6	1.6	3.0	1.3	-0.0	-5.6	-2.0	-2.4	2.4	2.0	-0.1
				Earthquake Y Mode 9	0.3	4.7	-0.0	2.3	-0.0	0.0	0.3	-1.8	0.1	1.7	-0.1	0.0
	Floor 4	30.0	9.00/12.00	Self weight	296.9	-7.5	31.0	-5.1	23.7	-0.5	259.0	4.3	-39.4	1.5	24.7	2.7
				Dead load	50.5	-12.2	5.2	-10.6	4.0	-0.2	47.3	17.1	-6.7	-5.2	4.3	0.1
				Live load	88.4	-5.4	18.6	-3.9	14.3	-0.2	82.8	4.5	-23.6	0.3	14.2	2.1
				Wind +X ecc.+	-0.5	-1.2	0.1	3.6	0.1	0.1	-0.2	-11.4	-0.1	1.4	0.0	0.3
				Wind +X ecc.-	1.3	-1.3	-0.3	4.0	-0.2	0.2	1.6	-12.7	0.4	1.6	-0.4	0.4
				Wind -X ecc.+	0.5	1.2	-0.1	-3.6	-0.1	-0.1	0.2	11.4	0.1	-1.4	-0.0	-0.3
				Wind -X ecc.-	-1.3	1.3	0.3	-4.0	0.2	-0.2	-1.6	12.7	-0.4	-1.6	0.4	-0.4
				Wind +Y ecc.+	-13.2	-0.0	2.9	1.3	2.2	0.1	-12.9	-3.8	-3.9	0.5	3.0	0.2
				Wind +Y ecc.-	-21.3	0.4	4.7	-0.7	3.5	-0.2	-21.0	2.2	-6.3	-0.3	5.0	-0.2
				Wind -Y ecc.+	13.2	0.0	-2.9	-1.3	-2.2	-0.1	12.9	3.8	3.9	-0.5	-3.0	-0.2
				Wind -Y ecc.-	21.3	-0.4	-4.7	0.7	-3.5	0.2	21.0	-2.2	6.3	0.3	-5.0	0.2
				Earthquake X Mode 1	32.3	3.8	-6.3	24.2	-4.7	1.9	33.2	-65.7	8.4	10.9	-7.1	3.1
				Earthquake X Mode 2	1.2	-7.7	-0.3	-45.4	-0.3	-0.4	-1.5	122.8	0.3	-20.1	0.6	-2.1
				Earthquake X Mode 3	-26.5	0.2	5.2	0.8	3.9	-0.2	-26.0	-2.1	-7.0	0.3	5.5	-0.2
				Earthquake X Mode 4	-15.1	-14.7	1.6	-6.2	1.2	-0.3	-15.0	3.7	-2.2	-4.3	1.8	-0.5
				Earthquake X Mode 5	-2.6	31.6	0.5	12.2	0.4	0.0	-2.3	-4.3	-0.7	8.6	0.4	0.3
				Earthquake X Mode 6	5.5	-0.5	-0.7	-0.1	-0.5	0.0	5.4	-0.1	0.9	-0.1	-0.7	0.0
				Earthquake X Mode 7	4.4	3.1	0.1	-0.5	0.1	-0.0	4.3	4.2	-0.1	-0.2	0.1	0.0
				Earthquake X Mode 8	-3.4	1.4	-0.1	-0.3	-0.0	-0.0	-3.3	2.3	0.1	-0.2	-0.1	-0.0
				Earthquake X Mode 9	1.2	7.2	0.0	-1.4	-0.0	-0.0	1.2	10.7	0.0	-0.7	-0.0	0.0
				Earthquake Y Mode 1	14.7	1.7	-2.8	11.0	-2.1	0.9	15.1	-29.8	3.8	5.0	-3.2	1.4
				Earthquake Y Mode 2	0.4	-2.4	-0.1	-14.0	-0.1	-0.1	-0.4	37.9	0.1	-6.2	0.2	-0.6



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 3	30.0	6.00/9.00	Self weight	439.7	-7.1	28.5	-4.9	22.1	-0.3	399.3	4.2	-36.9	1.5	22.3	3.0
				Dead load	83.6	-11.1	4.8	-8.8	3.7	-0.2	79.9	13.4	-6.1	-3.8	3.9	0.1
				Live load	163.7	-5.1	17.2	-3.6	13.3	-0.1	156.9	3.7	-21.9	0.5	13.0	2.0
				Wind +X ecc.+	-0.1	3.3	0.0	5.8	0.0	0.2	0.2	-13.5	-0.0	2.9	-0.1	0.4
				Wind +X ecc.-	4.0	3.7	-0.6	6.5	-0.4	0.3	4.3	-15.1	0.8	3.2	-0.7	0.5
				Wind -X ecc.+	0.1	-3.3	-0.0	-5.8	-0.0	-0.2	-0.2	13.5	0.0	-2.9	0.1	-0.4
				Wind -X ecc.-	-4.0	-3.7	0.6	-6.5	0.4	-0.3	-4.3	15.1	-0.8	-3.2	0.7	-0.5
				Wind +Y ecc.+	-29.4	1.2	4.4	1.7	3.3	0.1	-28.8	-3.8	-5.9	0.8	4.6	0.2
				Wind +Y ecc.-	-48.1	-0.6	7.2	-1.5	5.4	-0.3	-47.3	3.6	-9.7	-0.8	7.7	-0.4
				Wind -Y ecc.+	29.4	-1.2	-4.4	-1.7	-3.3	-0.1	28.8	3.8	5.9	-0.8	-4.6	-0.2
				Wind -Y ecc.-	48.1	0.6	-7.2	1.5	-5.4	0.3	47.3	-3.6	9.7	0.8	-7.7	0.4
				Earthquake X Mode 1	69.9	30.9	-9.1	34.6	-6.8	2.5	70.5	-69.5	12.3	18.2	-10.4	4.1
				Earthquake X Mode 2	-7.7	-60.5	0.8	-64.5	0.5	-0.7	-10.7	127.0	-1.2	-33.7	2.1	-3.1
				Earthquake X Mode 3	-53.8	1.1	7.1	0.8	5.3	-0.3	-52.8	-1.2	-9.5	0.4	7.5	-0.3
				Earthquake X Mode 4	-19.3	-13.1	0.4	-1.2	0.3	-0.1	-19.0	-9.0	-0.5	-1.1	0.4	-0.2
				Earthquake X Mode 5	-3.5	27.7	0.2	1.7	0.1	-0.0	-3.5	21.4	-0.2	2.0	0.1	0.1
				Earthquake X Mode 6	7.1	-0.4	-0.2	0.0	-0.1	0.0	7.0	-0.5	0.2	-0.0	-0.2	0.0
				Earthquake X Mode 7	1.8	-4.3	0.7	-3.1	0.5	-0.1	1.7	4.7	-1.0	-2.4	0.8	-0.1
				Earthquake X Mode 8	-1.3	-2.1	-0.6	-1.4	-0.5	0.0	-1.3	1.9	0.8	-1.1	-0.7	-0.0
				Earthquake X Mode 9	0.5	-10.5	0.1	-7.4	0.1	-0.0	0.3	10.6	-0.2	-5.6	0.2	-0.1
				Earthquake Y Mode 1	31.7	14.0	-4.1	15.7	-3.1	1.1	32.0	-31.5	5.6	8.2	-4.7	1.9
				Earthquake Y Mode 2	-2.4	-18.7	0.2	-19.9	0.2	-0.2	-3.3	39.2	-0.4	-10.4	0.7	-0.9
				Earthquake Y Mode 3	-331.0	6.6	43.6	4.8	32.7	-1.7	-325.3	-7.4	-58.4	2.2	46.2	-1.8
				Earthquake Y Mode 4	-3.7	-2.5	0.1	-0.2	0.1	-0.0	-3.7	-1.7	-0.1	-0.2	0.1	-0.0
				Earthquake Y Mode 5	-0.6	5.0	0.0	0.3	0.0	-0.0	-0.6	3.9	-0.0	0.4	0.0	0.0
				Earthquake Y Mode 6	58.8	-3.4	-1.3	0.2	-1.0	0.1	57.8	-3.7	1.7	-0.0	-1.4	0.1
				Earthquake Y Mode 7	0.5	-1.3	0.2	-0.9	0.2	-0.0	0.5	1.4	-0.3	-0.7	0.2	-0.0
				Earthquake Y Mode 8	-3.4	-5.2	-1.5	-3.5	-1.2	0.0	-3.3	4.8	2.1	-2.7	-1.7	-0.0
				Earthquake Y Mode 9	0.2	-3.8	0.1	-2.7	0.0	-0.0	0.1	3.9	-0.1	-2.0	0.1	-0.0
	Floor 2	30.0	3.00/6.00	Self weight	595.5	-6.9	25.3	-5.0	19.6	-0.2	552.4	4.7	-32.4	1.4	18.8	3.1
				Dead load	119.3	-11.7	4.2	-9.2	3.2	-0.1	114.9	14.0	-5.4	-4.2	3.3	0.2
				Live load	245.8	-4.9	15.8	-3.6	12.2	-0.1	237.5	4.0	-19.9	0.5	11.4	2.1
				Wind +X ecc.+	0.8	13.5	-0.0	8.7	-0.0	0.2	1.1	-11.7	0.1	5.3	-0.2	0.5
				Wind +X ecc.-	8.2	15.0	-0.8	9.7	-0.6	0.3	8.4	-13.3	1.1	6.0	-1.0	0.6
				Wind -X ecc.+	-0.8	-13.5	0.0	-8.7	0.0	-0.2	-1.1	11.7	-0.1	-5.3	0.2	-0.5
				Wind -X ecc.-	-8.2	-15.0	0.8	-9.7	0.6	-0.3	-8.4	13.3	-1.1	-6.0	1.0	-0.6
				Wind +Y ecc.+	-51.9	4.2	5.6	2.3	4.2	0.1	-50.9	-2.3	-7.4	1.4	5.9	0.2
				Wind +Y ecc.-	-85.9	-2.5	9.4	-2.6	6.9	-0.4	-84.6	5.1	-12.3	-1.5	9.9	-0.6
				Wind -Y ecc.+	51.9	-4.2	-5.6	-2.3	-4.2	-0.1	50.9	2.3	7.4	-1.4	-5.9	-0.2
				Wind -Y ecc.-	85.9	2.5	-9.4	2.6	-6.9	0.4	84.6	-5.1	12.3	1.5	-9.9	0.6
Earthquake X Mode 1				120.1	77.5	-11.0	44.6	-8.2	2.7	119.7	-53.3	14.7	27.6	-12.5	4.5	
Earthquake X Mode 2				-22.4	-151.0	1.5	-82.4	1.1	-0.9	-24.9	90.9	-2.2	-51.2	3.1	-3.6	
Earthquake X Mode 3				-88.0	2.7	8.2	0.6	6.1	-0.3	-86.5	0.8	-10.8	0.4	8.6	-0.4	
Earthquake X Mode 4				-16.0	0.2	-1.2	5.5	-0.9	0.2	-15.6	-15.3	1.7	3.7	-1.4	0.3	
Earthquake X Mode 5				-3.8	-0.8	-0.2	-11.8	-0.2	-0.1	-4.0	32.3	0.3	-7.8	-0.2	-0.2	
Earthquake X Mode 6				6.0	0.0	0.5	0.1	0.4	-0.0	5.9	-0.4	-0.7	0.1	0.5	-0.0	
Earthquake X Mode 7				-0.3	-3.6	0.1	-0.2	0.1	-0.0	-0.4	-2.7	-0.2	-0.3	0.2	-0.1	
Earthquake X Mode 8				0.3	-1.6	-0.1	0.0	-0.1	0.0	0.3	-1.6	0.2	-0.0	-0.1	0.0	
Earthquake X Mode 9				-0.2	-8.7	0.0	-0.3	0.0	-0.0	-0.2	-7.2	-0.1	-0.5	0.1	-0.1	
Earthquake Y Mode 1				54.5	35.2	-5.0	20.3	-3.7	1.2	54.3	-24.2	6.7	12.5	-5.7	2.1	
Earthquake Y Mode 2				-6.9	-46.7	0.5	-25.5	0.3	-0.3	-7.7	28.1	-0.7	-15.8	1.0	-1.1	
Earthquake Y Mode 3				-541.5	16.5	50.2	4.0	37.4	-2.1	-532.5	4.9	-66.2	2.7	53.0	-2.4	
Earthquake Y Mode 4				-3.1	0.0	-0.2	1.1	-0.2	0.0	-3.0	-3.0	0.3	0.7	-0.3	0.1	
Earthquake Y Mode 5				-0.7	-0.1	-0.0	-2.1	-0.0	-0.0	-0.7	5.9	0.1	-1.4	-0.0	-0.0	
Earthquake Y Mode 6				49.6	0.1	4.0	1.1	3.0	-0.1	48.8	-3.0	-5.4	0.8	4.2	-0.1	
Earthquake Y Mode 7				-0.1	-1.1	0.0	-0.1	0.0	-0.0	-0.1	-0.8	-0.1	-0.1	0.1	-0.0	
Earthquake Y Mode 8				0.8	-4.1	-0.2	0.1	-0.2	0.0	0.8	-4.0	0.4	-0.1	-0.3	0.0	
Earthquake Y Mode 9				-0.1	-3.2	0.0	-0.1	0.0	-0.0	-0.1	-2.6	-0.0	-0.2	0.0	-0.0	
Floor 1	30.0	0.00/3.00	Self weight	781.2	-1.7	10.0	-3.1	10.4	-0.0	734.7	4.4	-19.0	3.0	6.2	3.4	
			Dead load	160.7	-5.5	1.6	-6.6	1.7	-0.0	155.6	12.5	-3.1	-1.9	1.2	0.3	
			Live load	345.1	-2.0	6.3	-2.4	6.6	-0.0	335.1	3.4	-11.9	1.5	3.7	2.3	
			Wind +X ecc.+	1.9	41.3	-0.0	14.1	-0.0	0.1	2.0	-0.4	0.1	11.4	-0.2	0.4	
			Wind +X ecc.-	13.0	46.1	-0.6	15.9	-0.5	0.2	12.9	-0.9	1.0	12.8	-0.9	0.5	
			Wind -X ecc.+	-1.9	-41.3	0.0	-14.1	0.0	-0.1	-2.0	0.4	-0.1	-11.4	0.2	-0.4	
			Wind -X ecc.-	-13.0	-46.1	0.6	-15.9	0.5	-0.2	-12.9	0.9	-1.0	-12.8	0.9	-0.5	
			Wind +Y ecc.+	-75.7	9.8	4.3	2.6	3.2	0.0	-74.4	2.1	-5.8	2.2	4.6	0.0	
			Wind +Y ecc.-	-126.6	-12.2	7.2	-5.7	5.4	-0.4	-124.6	4.6	-9.8	-4.3	7.9	-0.6	
			Wind -Y ecc.+	75.7	-9.8	-4.3	-2.6	-3.2	-0.0	74.4	-2.1	5.8	-2.2	-4.6	-0.0	
			Wind -Y ecc.-	126.6	12.2	-7.2	5.7	-5.4	0.4	124.6	-4.6	9.8	4.3	-7.9	0.6	
			Earthquake X Mode 1	170.4	189.0	-7.9	62.4	-6.0	1.8	168.2	4.2	11.0	49.7	-9.4	3.3	
			Earthquake X Mode 2	-37.3	-363.0	1.0	-114.7	0.8	-0.6	-37.7	-22.7	-1.8	-92.4	2.6	-2.9	
			Earthquake X Mode 3	-120.8	3.3	5.7	-0.2	4.3	-0.3	-118.8	3.8	-7.7	0.0	6.2	-0.4	
			Earthquake X Mode 4	-7.9	23.7	-1.4	10.6	-1.1	0.2	-7.7	-7.0	2.0	8.4	-1.7	0.4	
			Earthquake X Mode 5	-3.3	-50.5	-0.4	-21.7	-0.3	-0.1	-3.4	12.6	0.4	-17.4	-0.2	-0.3	
			Earthquake X Mode 6	3.1	0.5	0.6	0.1	0.4	-0.0	3.1	0.1	-0.8	0.1	0.6	-0.0	
			Earthquake X Mode 7	1.3	6.3	-0.5	3.8	-0.4	0.0	1.3	-4.5	0.7	3.0	-0.5	0.1	
			Earthquake X Mode 8	-1.0	2.9	0.4	1.7	0.3	-0.0	-0.9	-1.8	-0.6	1.3	0.5	0.0	
			Earthquake X Mode 9	0.2	15.3	-0.1	9.0	-0.1	0.0	0.3	-10.4	0.1	7.2	-0.1	0.0	
			Earthquake Y Mode 1	77.3	85.8	-3.6	28.3	-2.7	0.8	76.3	1.9	5.0	22.5	-4.3	1.5	
			Earthquake Y Mode 2	-11.5	-112.1	0.3	-35.4	0.3	-0.2	-11.6	-7.0	-0.6	-28.5	0.8	-0.9	
Earthquake Y Mode 3	-743.7	20.4	35.1	-1.2	26.4	-1.6	-731.5	23.6	-47.2	0.2	38.0	-2.3				
Earthquake Y Mode 4	-1.5	4.6	-0.3	2.0	-0.2	0.0	-1.5	-1.4	0.4	1.6	-0.3	0.1				
Earthquake Y Mode 5	-0.6	-9.2	-0.1	-3.9	-0.0	-0.0	-0.6	2.3	0.1	-3.2	-0.0	-0.1				
Earthquake Y Mode 6	25.9	4.2	4.5	1.0	3.5	-0.1	25.4	1.2	-6.5	1.0	5.1	-0.2				
Earthquake Y Mode 7	0.4	1.9	-0.1	1.1	-0.1	0.0	0.4	-1.4	0.2	0.9	-0.2	0.0				
Earthquake Y Mode 8	-2.4	7.3	1.0	4.1	0.8	-0.0	-2.4	-4.6	-1.5	3.4	1.2	0.0				
Earthquake Y Mode 9	0.1	5.6	-0.0	3.3	-0.0	0.0	0.1	-3.8	0.0	2.6	-0.0	0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
W2	techo	30.0	12.00/15.00	Self weight	111.9	-1.3	-15.9	-2.5	-12.6	-0.1	76.6	4.3	22.0	1.2	-13.8	-2.2			
				Dead load	103.1	-13.8	-9.2	-11.2	-8.3	0.1	94.4	16.7	15.0	-4.7	-7.5	-2.0			
				Live load	7.1	-2.2	-7.9	-1.1	-5.8	-0.0	5.4	0.8	10.0	-0.2	-7.3	-0.5			
				Wind +X ecc.+	-0.7	-2.7	-0.1	1.1	-0.1	-0.1	-0.5	-5.8	0.2	-0.1	-0.1	-0.2			
				Wind +X ecc.-	-1.0	-2.5	-0.4	1.0	-0.3	-0.0	-0.9	-5.2	0.5	-0.1	-0.3	-0.1			
				Wind -X ecc.+	0.7	2.7	0.1	-1.1	0.1	0.1	0.5	5.8	-0.2	0.1	0.1	0.2			
				Wind -X ecc.-	1.0	2.5	0.4	-1.0	0.3	0.0	0.9	5.2	-0.5	0.1	0.3	0.1			
				Wind +Y ecc.+	3.3	0.1	1.5	-1.1	1.2	0.1	3.3	3.2	-2.2	-0.5	1.6	0.2			
				Wind +Y ecc.-	5.0	-1.1	2.5	-0.5	1.9	-0.1	5.1	0.5	-3.5	-0.6	2.7	-0.1			
				Wind -Y ecc.+	-3.3	-0.1	-1.5	1.1	-1.2	-0.1	-3.3	-3.2	2.2	0.5	-1.6	-0.2			
				Wind -Y ecc.-	-5.0	1.1	-2.5	0.5	-1.9	0.1	-5.1	-0.5	3.5	0.6	-2.7	0.1			
				Earthquake X Mode 1	-10.2	-4.0	-4.3	0.1	-3.4	0.9	-10.2	-4.2	6.2	-0.5	-4.6	1.0			
				Earthquake X Mode 2	8.2	22.7	2.1	-26.3	1.7	1.8	5.6	96.5	-3.0	-5.5	1.4	3.8			
				Earthquake X Mode 3	7.2	-1.0	3.1	0.7	2.4	-0.2	7.3	-2.9	-4.4	-0.1	3.4	-0.2			
				Earthquake X Mode 4	6.0	-0.0	1.9	-0.1	1.5	-0.2	6.0	0.1	-2.7	-0.0	2.1	-0.3			
				Earthquake X Mode 5	3.1	20.0	0.7	15.1	0.5	-0.4	3.6	-23.5	-1.0	9.5	1.0	-0.9			
				Earthquake X Mode 6	-2.3	-0.5	-0.7	-0.3	-0.6	0.0	-2.4	0.6	1.0	-0.2	-0.8	0.0			
				Earthquake X Mode 7	-2.9	-0.3	-0.8	-0.2	-0.6	0.1	-2.9	0.4	1.1	-0.2	-0.9	0.1			
				Earthquake X Mode 8	2.5	2.6	0.6	1.3	0.5	-0.0	2.5	-1.1	-0.9	1.0	0.7	-0.1			
				Earthquake X Mode 9	0.3	17.4	-0.0	8.1	-0.0	-0.1	0.4	-6.1	0.0	6.4	0.0	-0.2			
				Earthquake Y Mode 1	-4.6	-1.8	-2.0	0.1	-1.5	0.4	-4.6	-1.9	2.8	-0.2	-2.1	0.4			
				Earthquake Y Mode 2	2.5	7.0	0.6	-8.1	0.5	0.6	1.7	29.8	-0.9	-1.7	0.4	1.2			
				Earthquake Y Mode 3	44.2	-6.1	19.1	4.2	14.9	-1.2	45.1	-17.8	-27.3	-0.5	20.9	-1.5			
				Earthquake Y Mode 4	1.2	-0.0	0.4	-0.0	0.3	-0.0	1.2	0.0	-0.5	-0.0	0.4	-0.1			
				Earthquake Y Mode 5	0.6	3.6	0.1	2.7	0.1	-0.1	0.7	-4.3	-0.2	1.7	0.2	-0.2			
				Earthquake Y Mode 6	-19.3	-3.8	-6.0	-2.9	-4.6	0.3	-19.4	4.6	8.6	-1.7	-6.7	0.4			
				Earthquake Y Mode 7	-0.9	-0.1	-0.2	-0.1	-0.2	0.0	-0.9	0.1	0.3	-0.0	-0.3	0.0			
				Earthquake Y Mode 8	6.2	6.5	1.6	3.2	1.3	-0.1	6.3	-2.8	-2.4	2.4	1.9	-0.1			
				Earthquake Y Mode 9	0.1	6.4	-0.0	3.0	-0.0	-0.0	0.2	-2.2	0.0	2.3	0.0	-0.1			
				Floor 4	30.0	9.00/12.00	Self weight	214.6	-2.0	-14.6	-1.6	-11.1	-0.1	176.4	2.2	15.8	-1.6	-5.5	1.0
							Dead load	118.2	-12.8	-4.6	-9.8	-3.5	0.2	113.2	14.2	5.4	-4.6	-2.9	1.6
							Live load	55.1	-2.3	-8.1	-1.8	-6.2	-0.1	49.6	2.6	8.4	-1.2	-2.2	0.4
	Wind +X ecc.+	-0.6	-0.7				-0.1	4.1	-0.1	-0.1	-0.5	-12.0	0.1	1.1	0.0	-0.4			
	Wind +X ecc.-	-2.2	-0.7				-0.4	3.6	-0.3	-0.0	-2.1	-10.6	0.6	1.0	-0.4	-0.3			
	Wind -X ecc.+	0.6	0.7				0.1	-4.1	0.1	0.1	0.5	12.0	-0.1	-1.1	-0.0	0.4			
	Wind -X ecc.-	2.2	0.7				0.4	-3.6	0.3	0.0	2.1	10.6	-0.6	-1.0	0.4	0.3			
	Wind +Y ecc.+	12.4	-0.1				2.7	-1.4	2.1	0.1	12.3	3.9	-3.7	-0.2	2.8	0.0			
	Wind +Y ecc.-	20.0	0.1				4.4	1.0	3.3	-0.2	19.8	-2.6	-5.9	0.7	4.6	-0.7			
	Wind -Y ecc.+	-12.4	0.1				-2.7	1.4	-2.1	-0.1	-12.3	-3.9	3.7	0.2	-2.8	-0.0			
	Wind -Y ecc.-	-20.0	-0.1				-4.4	-1.0	-3.3	0.2	-19.8	2.6	5.9	-0.7	-4.6	0.7			
Earthquake X Mode 1	-32.8	-2.4	-6.3				1.9	-4.7	1.2	-32.4	-7.7	8.4	-0.1	-6.5	1.9				
Earthquake X Mode 2	6.6	-21.7	1.7				-68.5	1.4	2.4	5.0	168.9	-1.9	-23.4	0.1	7.7				
Earthquake X Mode 3	25.2	1.5	4.9				3.2	3.6	-0.3	25.0	-7.4	-6.5	1.5	5.1	-1.0				
Earthquake X Mode 4	14.3	-1.1	1.6				-0.2	1.2	-0.2	14.1	-0.4	-2.1	-0.1	1.7	-0.5				
Earthquake X Mode 5	8.7	43.3	0.5				17.5	0.4	-0.3	8.9	-7.6	-0.8	10.9	0.9	-1.4				
Earthquake X Mode 6	-5.7	-0.9	-0.6				-0.5	-0.5	0.0	-5.7	0.4	0.9	-0.3	-0.7	0.1				
Earthquake X Mode 7	-4.3	0.1	0.1				0.1	0.1	-0.0	-4.2	-0.1	-0.1	0.1	0.0	0.0				
Earthquake X Mode 8	3.8	1.4	-0.1				-0.2	-0.1	0.0	3.7	2.0	0.1	-0.1	-0.0	-0.1				
Earthquake X Mode 9	0.4	9.3	-0.1				-2.0	-0.0	0.0	0.5	14.3	0.0	-1.2	-0.0	-0.0				
Earthquake Y Mode 1	-14.9	-1.1	-2.8				0.9	-2.1	0.6	-14.7	-3.5	3.8	-0.0	-3.0	0.8				
Earthquake Y Mode 2	2.0	-6.7	0.5				-21.2	0.4	0.7	1.6	52.2	-0.6	-7.2	0.0	2.4				
Earthquake Y Mode 3	154.9	9.0	29.9				19.6	22.4	-1.7	153.8	-45.5	-40.1	9.2	31.5	-6.3				
Earthquake Y Mode 4	2.8	-0.2	0.3				-0.0	0.2	-0.0	2.7	-0.1	-0.4	-0.0	0.3	-0.1				
Earthquake Y Mode 5	1.6	7.9	0.1				3.2	0.1	-0.1	1.6	-1.4	-0.1	2.0	0.2	-0.2				
Earthquake Y Mode 6	-47.2	-7.5	-5.2				-3.7	-3.9	0.2	-46.6	3.2	7.0	-2.4	-5.7	1.2				
Earthquake Y Mode 7	-1.3	0.0	0.0				0.0	0.0	-0.0	-1.3	-0.0	-0.0	0.0	0.0	0.0				
Earthquake Y Mode 8	9.4	3.5	-0.2				-0.6	-0.1	0.0	9.2	4.9	0.2	-0.4	-0.1	-0.1				
Earthquake Y Mode 9	0.1	3.4	-0.0				-0.7	-0.0	0.0	0.2	5.2	0.0	-0.4	-0.0	-0.0				
Floor 3	30.0	6.00/9.00	Self weight				323.1	-1.9	-12.9	-1.4	-10.0	-0.2	282.8	2.0	13.9	-1.2	-3.9	0.7	
			Dead load				141.9	-11.7	-4.0	-9.3	-3.2	0.1	136.5	13.9	4.9	-4.3	-2.2	1.1	
			Live load				104.8	-2.3	-7.4	-1.8	-5.7	-0.1	98.4	2.7	7.6	-1.1	-1.5	0.3	
			Wind +X ecc.+	0.5	4.0	0.0	6.4	0.0	-0.2	0.6	-14.0	-0.1	2.5	0.2	-0.7				
			Wind +X ecc.-	-3.6	3.5	-0.6	5.6	-0.4	-0.1	-3.4	-12.3	0.7	2.1	-0.5	-0.4				
			Wind -X ecc.+	-0.5	-4.0	-0.0	-6.4	-0.0	0.2	-0.6	14.0	0.1	-2.5	-0.2	0.7				
			Wind -X ecc.-	3.6	-3.5	0.6	-5.6	0.4	0.1	3.4	12.3	-0.7	-2.1	0.5	0.4				
			Wind +Y ecc.+	28.8	-1.2	4.1	-1.7	3.1	0.1	28.4	3.7	-5.6	-0.4	4.4	-0.1				
			Wind +Y ecc.-	47.3	1.4	6.8	2.1	5.1	-0.3	46.8	-4.3	-9.2	1.2	7.3	-1.2				
			Wind -Y ecc.+	-28.8	1.2	-4.1	1.7	-3.1	-0.1	-28.4	-3.7	5.6	0.4	-4.4	0.1				
			Wind -Y ecc.-	-47.3	-1.4	-6.8	-2.1	-5.1	0.3	-46.8	4.3	9.2	-1.2	-7.3	1.2				
			Earthquake X Mode 1	-67.9	1.9	-8.6	3.1	-6.5	1.5	-67.0	-6.9	11.7	0.8	-9.2	2.4				
			Earthquake X Mode 2	-3.3	-90.9	1.2	-92.8	1.0	3.1	-5.2	171.0	-0.9	-38.4	-1.3	10.2				
			Earthquake X Mode 3	53.7	4.6	6.7	4.7	5.0	-0.4	53.1	-8.5	-9.0	2.3	7.3	-1.5				
			Earthquake X Mode 4	18.5	-1.3	0.4	-0.0	0.3	-0.1	18.2	-1.2	-0.5	-0.1	0.4	-0.2				
			Earthquake X Mode 5	10.7	36.7	-0.1	2.4	-0.0	-0.0	10.7	27.9	0.0	2.1	0.1	-0.5				
			Earthquake X Mode 6	-7.4	-0.7	-0.2	-0.1	-0.1	0.0	-7.3	-0.5	0.2	-0.1	-0.2	0.1				
			Earthquake X Mode 7	-1.6	0.4	0.7	0.3	0.5	-0.1	-1.5	-0.4	-0.9	0.2	0.8	-0.1				
			Earthquake X Mode 8	1.3	-2.2	-0.6	-1.6	-0.5	0.0	1.2	2.4	0.9	-1.2	-0.7	0.1				
			Earthquake X Mode 9	-0.4	-14.3	0.0	-9.9	0.0	0.1	-0.4	14.0	0.0	-7.2	-0.1	0.3				
			Earthquake Y Mode 1	-30.8	0.9	-3.9	1.4	-2.9	0.7	-30.4	-3.1	5.3	0.3	-4.2	1.1				
			Earthquake Y Mode 2	-1.0	-28.1	0.4	-28.7	0.3	0.9	-1.6	52.8	-0.3	-11.9	-0.4	3.2				
			Earthquake Y Mode 3	330.6	28.5	41.1	28.8	30.8	-2.4	326.9	-52.5	-55.5	14.4	44.6	-9.2				
			Earthquake Y Mode 4	3.6	-0.3	0.1	-0.0	0.1	-0.0	3.5	-0.2	-0.1	-0.0	0.1	-0.0				
			Earthquake Y Mode 5	1.9	6.7	-0.0	0.4	-0.0	-0.0	1.9	5.1	0.0	0.4	0.0	-0.1				
			Earthquake Y Mode 6	-61.3	-5.8	-1.2	-0.6	-0.9	0.1	-60.3	-3.7	1.6	-0.5	-1.4	0.6				
			Earthquake Y Mode 7	-0.5	0.1	0.2	0.1	0.2	-0.0	-0.5	-0.1	-0.3	0.1	0.2	-0.0				
			Earthquake Y Mode 8	3.2	-5.5	-1.5	-4.0	-1.2	0.1	3.1	6.0	2.1	-2.9	-1.7	0.3				
Earthquake Y Mode 9	-0.1	-5.2	0.0	-3.6	0.0	0.0	-0.1	5.1	0.0	-2.6	-0.0	0.1							



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	30.0	3.00/6.00	Self weight	443.4	-0.6	-10.6	-1.1	-8.3	-0.2	400.8	2.5	10.7	-0.6	-1.2	0.4
				Dead load	171.4	-11.5	-3.1	-9.1	-2.5	0.0	165.5	13.7	3.5	-4.3	-1.0	0.9
				Live load	160.1	-1.4	-6.3	-1.5	-4.9	-0.2	152.6	2.7	6.1	-0.7	-0.2	0.2
				Wind +X ecc.+	2.5	14.5	0.1	9.4	0.1	-0.2	2.6	-12.3	-0.2	4.9	0.3	-0.8
				Wind +X ecc.-	-5.2	12.7	-0.7	8.2	-0.5	-0.1	-5.0	-10.6	0.8	4.2	-0.5	-0.5
				Wind -X ecc.+	-2.5	-14.5	-0.1	-9.4	-0.1	0.2	-2.6	12.3	0.2	-4.9	-0.3	0.8
				Wind -X ecc.-	5.2	-12.7	0.7	-8.2	0.5	0.1	5.0	10.6	-0.8	-4.2	0.5	0.5
				Wind +Y ecc.+	52.0	-4.2	5.4	-2.2	4.0	0.1	51.2	2.1	-7.1	-1.0	5.7	-0.3
				Wind +Y ecc.-	87.0	3.9	8.9	3.5	6.6	-0.4	85.8	-6.0	-11.8	2.1	9.6	-1.7
				Wind -Y ecc.+	-52.0	4.2	-5.4	2.2	-4.0	-0.1	-51.2	-2.1	7.1	1.0	-5.7	0.3
				Wind -Y ecc.-	-87.0	-3.9	-8.9	-3.5	-6.6	0.4	-85.8	6.0	11.8	-2.1	-9.6	1.7
				Earthquake X Mode 1	-113.7	9.2	-10.2	3.8	-7.6	1.6	-111.9	-2.0	13.6	1.7	-11.0	2.8
				Earthquake X Mode 2	-21.0	-207.7	0.5	-115.9	0.4	3.2	-22.8	124.7	0.4	-60.4	-2.7	11.3
				Earthquake X Mode 3	90.4	9.7	7.8	6.2	5.8	-0.5	89.2	-8.1	-10.4	3.5	8.5	-1.8
				Earthquake X Mode 4	15.4	-0.4	-1.1	0.2	-0.8	0.1	15.1	-0.9	1.5	0.1	-1.2	0.2
				Earthquake X Mode 5	6.8	-1.9	-0.7	-16.4	-0.5	0.3	6.7	43.5	1.0	-10.3	-1.0	0.7
				Earthquake X Mode 6	-6.1	0.1	0.5	0.4	0.4	-0.0	-6.0	-1.0	-0.6	0.3	0.5	-0.1
				Earthquake X Mode 7	0.5	0.1	0.1	0.0	0.1	-0.0	0.5	-0.0	-0.2	0.0	0.2	-0.1
				Earthquake X Mode 8	-0.7	-1.7	-0.1	-0.1	-0.1	0.0	-0.7	-1.3	0.2	-0.1	-0.2	0.1
				Earthquake X Mode 9	-0.8	-11.3	0.0	-0.4	0.0	0.0	-0.8	-9.6	0.0	-0.4	-0.1	0.2
				Earthquake Y Mode 1	-51.6	4.2	-4.6	1.7	-3.4	0.7	-50.8	-0.9	6.2	0.8	-5.0	1.3
				Earthquake Y Mode 2	-6.5	-64.2	0.1	-35.8	0.1	1.0	-7.0	38.5	0.1	-18.7	-0.8	3.5
				Earthquake Y Mode 3	556.4	59.7	48.0	38.4	35.5	-2.8	548.8	-49.6	-63.9	21.6	52.5	-11.3
				Earthquake Y Mode 4	3.0	-0.1	-0.2	0.0	-0.2	0.0	2.9	-0.2	0.3	0.0	-0.2	0.0
				Earthquake Y Mode 5	1.2	-0.4	-0.1	-3.0	-0.1	0.1	1.2	7.9	0.2	-1.9	-0.2	0.1
				Earthquake Y Mode 6	-50.1	1.1	3.9	3.5	2.9	-0.1	-49.0	-8.6	-5.3	2.1	4.3	-0.4
				Earthquake Y Mode 7	0.1	0.0	0.0	0.0	0.0	-0.0	0.1	-0.0	-0.1	0.0	0.0	-0.0
				Earthquake Y Mode 8	-1.6	-4.4	-0.2	-0.4	-0.2	0.0	-1.7	-3.1	0.4	-0.3	-0.4	0.2
				Earthquake Y Mode 9	-0.3	-4.1	0.0	-0.1	0.0	0.0	-0.3	-3.5	0.0	-0.2	-0.0	0.1
	Floor 1	30.0	0.00/3.00	Self weight	581.2	3.2	-3.5	-0.6	-4.0	-0.2	535.8	4.8	4.5	0.5	4.8	-0.1
				Dead load	208.1	-5.1	-1.0	-6.5	-1.2	-0.0	201.4	12.4	1.5	-2.1	1.0	0.5
				Live load	225.2	0.9	-2.1	-1.0	-2.4	-0.1	216.4	3.7	2.6	-0.0	3.2	-0.1
				Wind +X ecc.+	4.7	43.2	0.1	15.1	0.1	-0.1	4.8	-1.0	-0.2	11.4	0.3	-0.7
				Wind +X ecc.-	-6.9	38.0	-0.5	13.1	-0.4	-0.0	-6.7	-0.3	0.6	9.9	-0.4	-0.4
				Wind -X ecc.+	-4.7	-43.2	-0.1	-15.1	-0.1	0.1	-4.8	1.0	0.2	-11.4	-0.3	0.7
				Wind -X ecc.-	6.9	-38.0	0.5	-13.1	0.4	0.0	6.7	0.3	-0.6	-9.9	0.4	0.4
				Wind +Y ecc.+	77.1	-10.5	4.1	-2.7	3.1	0.0	75.9	-2.5	-5.6	-2.1	4.6	-0.5
				Wind +Y ecc.-	130.7	13.8	7.0	6.7	5.2	-0.3	128.6	-5.4	-9.5	4.9	7.9	-1.6
				Wind -Y ecc.+	-77.1	10.5	-4.1	2.7	-3.1	-0.0	-75.9	2.5	5.6	2.1	-4.6	0.5
				Wind -Y ecc.-	-130.7	-13.8	-7.0	-6.7	-5.2	0.3	-128.6	5.4	9.5	-4.9	-7.9	1.6
				Earthquake X Mode 1	-159.9	23.3	-7.4	5.2	-5.5	1.0	-157.1	7.5	10.0	4.3	-8.3	2.1
				Earthquake X Mode 2	-40.9	-484.7	0.3	-157.1	0.1	2.0	-41.8	-22.5	1.2	-117.3	-2.9	8.5
				Earthquake X Mode 3	126.5	24.0	5.5	9.2	4.1	-0.3	124.5	-2.8	-7.5	6.8	6.3	-1.6
				Earthquake X Mode 4	7.6	1.5	-1.3	0.3	-1.0	0.1	7.4	0.4	1.9	0.4	-1.5	0.3
				Earthquake X Mode 5	-0.1	-69.0	-0.6	-30.2	-0.5	0.3	-0.2	18.5	1.1	-23.1	-1.2	1.1
Earthquake X Mode 6				-2.8	1.6	0.5	0.8	0.4	-0.0	-2.7	-0.8	-0.8	0.6	0.6	-0.1	
Earthquake X Mode 7				-1.3	-0.3	-0.5	-0.3	-0.4	0.0	-1.3	0.4	0.7	-0.2	-0.5	0.1	
Earthquake X Mode 8				1.0	3.2	0.4	1.9	0.3	-0.0	1.0	-2.3	-0.6	1.5	0.5	-0.0	
Earthquake X Mode 9				-0.3	20.5	-0.0	12.0	-0.0	-0.1	-0.4	-13.9	0.0	9.5	0.0	-0.1	
Earthquake Y Mode 1				-72.5	10.6	-3.4	2.4	-2.5	0.5	-71.3	3.4	4.5	1.9	-3.8	1.0	
Earthquake Y Mode 2				-12.6	-149.7	0.1	-48.5	0.0	0.6	-12.9	-6.9	0.4	-36.2	-0.9	2.6	
Earthquake Y Mode 3				778.8	147.7	34.0	56.8	25.2	-1.9	766.3	-17.4	-46.1	41.8	38.9	-9.6	
Earthquake Y Mode 4				1.5	0.3	-0.3	0.1	-0.2	0.0	1.4	0.1	0.4	0.1	-0.3	0.1	
Earthquake Y Mode 5				-0.0	-12.6	-0.1	-5.5	-0.1	0.1	-0.0	3.4	0.2	-4.2	-0.2	0.2	
Earthquake Y Mode 6				-23.0	13.4	4.4	6.8	3.4	-0.2	-22.3	-6.2	-6.4	4.9	5.3	-0.9	
Earthquake Y Mode 7				-0.4	-0.1	-0.1	-0.1	-0.1	0.0	-0.4	0.1	0.2	-0.1	-0.2	0.0	
Earthquake Y Mode 8				2.5	7.9	1.0	4.8	0.8	-0.0	2.4	-5.8	-1.5	3.8	1.2	-0.1	
Earthquake Y Mode 9				-0.1	7.5	-0.0	4.4	-0.0	-0.0	-0.1	-5.1	0.0	3.5	0.0	-0.0	
W3	techo	30.0	12.00/15.00	Self weight	33.2	1.8	24.5	0.8	20.4	-0.0	12.4	-0.8	-34.7	0.9	8.3	-0.0
				Dead load	26.9	1.1	3.3	1.1	3.6	-0.0	24.7	-2.3	-6.7	1.7	1.4	0.1
				Live load	15.4	0.9	8.9	0.6	9.4	-0.0	13.5	-1.1	-18.0	0.9	4.0	0.0
				Wind +X ecc.+	-1.1	0.3	-0.6	0.3	-0.5	-0.0	-1.0	-0.7	0.8	0.5	-0.3	0.0
				Wind +X ecc.-	-1.0	0.3	-0.9	0.3	-1.0	-0.0	-0.8	-0.7	1.9	0.5	-0.6	0.0
				Wind -X ecc.+	1.1	-0.3	0.6	-0.3	0.5	0.0	1.0	0.7	-0.8	-0.5	0.3	-0.0
				Wind -X ecc.-	1.0	-0.3	0.9	-0.3	1.0	0.0	0.8	0.7	-1.9	-0.5	0.6	-0.0
				Wind +Y ecc.+	-1.1	0.1	0.2	0.1	2.1	0.1	-1.2	-0.2	-5.7	0.1	1.0	0.1
				Wind +Y ecc.-	-1.9	0.1	1.4	0.1	4.3	0.0	-2.1	-0.1	-10.9	0.1	2.2	0.0
				Wind -Y ecc.+	1.1	-0.1	-0.2	-0.1	-2.1	-0.1	1.2	0.2	5.7	-0.1	-1.0	-0.1
				Wind -Y ecc.-	1.9	-0.1	-1.4	-0.1	-4.3	-0.0	2.1	0.1	10.9	-0.1	-2.2	-0.0
				Earthquake X Mode 1	-1.1	1.0	-10.7	1.2	-13.1	0.4	-0.1	-2.8	26.7	1.9	-7.9	0.6
				Earthquake X Mode 2	18.1	-3.8	5.5	-4.2	4.8	0.6	16.6	9.7	-7.9	-6.6	3.1	0.3
				Earthquake X Mode 3	-3.5	0.2	3.8	0.2	6.3	-0.0	-3.7	-0.5	-14.3	0.3	3.5	0.0
				Earthquake X Mode 4	-0.5	-0.4	7.5	-0.3	6.8	-0.1	-0.8	0.7	-11.9	-0.5	4.3	-0.1
				Earthquake X Mode 5	-7.6	1.2	0.8	1.1	0.6	-0.1	-7.0	-2.3	-1.0	1.7	0.5	-0.1
				Earthquake X Mode 6	1.2	-0.0	-2.3	-0.0	-2.1	-0.0	1.2	0.1	3.7	-0.0	-1.3	-0.0
				Earthquake X Mode 7	0.8	0.1	-5.1	0.1	-3.5	0.0	0.9	-0.2	5.1	0.1	-2.4	0.0
				Earthquake X Mode 8	-1.7	0.1	3.9	0.1	2.6	0.0	-1.7	-0.1	-3.6	0.1	1.8	0.0
				Earthquake X Mode 9	-2.0	0.5	-0.7	0.3	-0.7	-0.0	-1.8	-0.6	1.2	0.5	-0.4	-0.0
				Earthquake Y Mode 1	-0.5	0.5	-4.9	0.6	-5.9	0.2	-0.0	-1.3	12.1	0.9	-3.6	0.3
				Earthquake Y Mode 2	5.6	-1.2	1.7	-1.3	1.5	0.2	5.1	3.0	-2.4	-2.0	0.9	0.1
Earthquake Y Mode 3	-21.7	1.4	23.2	1.3	38.8	-0.0	-22.9	-2.8	-88.1	2.1	21.7	0.1				
Earthquake Y Mode 4	-0.1	-0.1	1.5	-0.1	1.3	-0.0	-0.1	0.1	-2.3	-0.1	0.8	-0.0				
Earthquake Y Mode 5	-1.4	0.2	0.2	0.2	0.1	-0.0	-1.3	-0.4	-0.2	0.3	0.1	-0.0				
Earthquake Y Mode 6	9.9	-0.2	-18.8	-0.2	-17.2	-0.0	10.0	0.4	30.7	-0.3	-11.0	-0.1				
Earthquake Y Mode 7	0.2	0.0	-1.5	0.0	-1.1	0.0	0.3	-0.1	1.5	0.0	-0.7	0.0				
Earthquake Y Mode 8	-4.3	0.2	9.7	0.2	6.5	0.0	-4.2	-0.3	-9.1	0.3	4.5	0.0				
Earthquake Y Mode 9	-0.7	0.2	-0.3	0.1	-0.2	-0.0	-0.6	-0.2	0.4	0.2	-0.1	-0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 4	30.0	9.00/12.00	Self weight	88.0	2.6	11.6	2.2	9.1	-0.0	67.5	-3.6	-17.2	1.7	0.7	-0.1				
				Dead load	31.1	0.4	5.0	0.2	4.0	0.0	30.2	-0.3	-6.7	0.0	1.8	0.0				
				Live load	25.0	1.1	5.8	0.9	4.6	-0.0	25.1	-1.4	-8.8	0.6	0.4	0.0				
				Wind +X ecc.+	-1.8	0.3	-1.0	0.3	-0.7	-0.0	-1.8	-0.5	1.2	0.2	-0.4	0.0				
				Wind +X ecc.-	-1.2	0.3	-1.8	0.3	-1.7	0.0	-1.2	-0.5	3.3	0.2	-1.0	0.0				
				Wind -X ecc.+	1.8	-0.3	1.0	-0.3	0.7	0.0	1.8	0.5	-1.2	-0.2	0.4	-0.0				
				Wind -X ecc.-	1.2	-0.3	1.8	-0.3	1.7	-0.0	1.2	0.5	-3.3	-0.2	1.0	-0.0				
				Wind +Y ecc.+	-5.0	0.1	4.5	0.1	6.0	0.2	-4.8	-0.2	-13.4	0.1	3.6	0.1				
				Wind +Y ecc.-	-7.7	0.1	8.1	0.1	10.6	0.1	-7.5	-0.1	-23.2	0.0	6.2	-0.1				
				Wind -Y ecc.+	5.0	-0.1	-4.5	-0.1	-6.0	-0.2	4.8	0.2	13.4	-0.1	-3.6	-0.1				
				Wind -Y ecc.-	7.7	-0.1	-8.1	-0.1	-10.6	-0.1	7.5	0.1	23.2	-0.0	-6.2	0.1				
				Earthquake X Mode 1	3.7	1.2	-20.2	1.2	-20.4	0.5	3.4	-2.2	40.4	1.0	-11.8	1.0				
				Earthquake X Mode 2	26.8	-3.6	12.1	-3.2	9.8	0.6	25.7	5.7	-16.7	-2.9	6.1	0.5				
				Earthquake X Mode 3	-10.9	0.2	10.7	0.2	11.8	0.1	-10.4	-0.3	-24.5	0.1	6.9	-0.2				
				Earthquake X Mode 4	-2.9	-0.4	9.2	-0.2	5.7	-0.0	-2.5	0.2	-8.0	-0.1	3.2	-0.2				
				Earthquake X Mode 5	-11.4	1.0	1.6	0.5	0.4	-0.1	-10.9	-0.5	0.3	0.4	0.3	-0.1				
				Earthquake X Mode 6	2.7	-0.0	-3.3	-0.0	-2.0	-0.0	2.5	0.0	2.7	-0.0	-1.2	0.0				
				Earthquake X Mode 7	1.3	0.0	-1.4	-0.0	0.5	-0.0	1.0	0.1	-2.4	-0.0	0.6	0.0				
				Earthquake X Mode 8	-2.3	0.0	1.4	-0.0	-0.3	0.0	-2.0	0.1	1.9	-0.0	-0.4	-0.0				
				Earthquake X Mode 9	-2.0	0.1	-0.1	-0.1	-0.0	0.0	-1.9	0.3	0.0	-0.1	0.0	0.0				
				Earthquake Y Mode 1	1.7	0.5	-9.2	0.5	-9.2	0.2	1.6	-1.0	18.4	0.5	-5.4	0.5				
				Earthquake Y Mode 2	8.3	-1.1	3.7	-1.0	3.0	0.2	7.9	1.8	-5.2	-0.9	1.9	0.2				
				Earthquake Y Mode 3	-67.2	1.2	65.7	1.0	72.7	0.4	-64.2	-1.6	-150.6	0.8	42.6	-1.0				
				Earthquake Y Mode 4	-0.5	-0.1	1.8	-0.0	1.1	-0.0	-0.5	0.0	-1.5	-0.0	0.6	-0.0				
				Earthquake Y Mode 5	-2.1	0.2	0.3	0.1	0.1	-0.0	-2.0	-0.1	0.0	0.1	0.0	-0.0				
				Earthquake Y Mode 6	21.9	-0.2	-27.1	-0.1	-16.5	-0.1	20.3	0.1	22.4	-0.1	-9.6	0.2				
				Earthquake Y Mode 7	0.4	0.0	-0.4	-0.0	0.1	-0.0	0.3	0.0	-0.7	-0.0	0.2	0.0				
				Earthquake Y Mode 8	-5.6	0.1	3.4	-0.0	-0.7	0.0	-5.0	0.1	4.8	-0.1	-1.0	-0.0				
				Earthquake Y Mode 9	-0.7	0.0	-0.1	-0.0	-0.0	0.0	-0.7	0.1	0.0	-0.0	0.0	0.0				
					Floor 3	30.0	6.00/9.00	Self weight	134.6	1.8	9.7	1.4	9.3	-0.0	112.1	-2.1	-18.4	0.8	2.2	0.0
								Dead load	35.3	0.4	4.0	0.3	3.1	0.0	34.3	-0.5	-5.2	0.2	1.1	-0.0
								Live load	34.1	0.9	4.5	0.7	4.4	-0.1	33.8	-1.1	-8.9	0.4	0.5	0.0
								Wind +X ecc.+	-3.6	0.4	-1.4	0.4	-1.1	-0.0	-3.4	-0.7	1.8	0.4	-0.6	0.0
								Wind +X ecc.-	-2.2	0.4	-3.1	0.4	-2.7	0.0	-2.1	-0.7	5.1	0.4	-1.6	0.1
								Wind -X ecc.+	3.6	-0.4	1.4	-0.4	1.1	0.0	3.4	0.7	-1.8	-0.4	0.6	-0.0
								Wind -X ecc.-	2.2	-0.4	3.1	-0.4	2.7	-0.0	2.1	0.7	-5.1	-0.4	1.6	-0.1
Wind +Y ecc.+	-12.3	0.1	9.7					0.1	9.8	0.2	-11.7	-0.2	-19.5	0.1	5.7	0.0				
Wind +Y ecc.-	-18.5	0.0	17.4					0.0	17.4	0.1	-17.6	-0.0	-34.4	0.0	10.1	-0.2				
Wind -Y ecc.+	12.3	-0.1	-9.7					-0.1	-9.8	-0.2	11.7	0.2	19.5	-0.1	-5.7	-0.0				
Wind -Y ecc.-	18.5	-0.0	-17.4					-0.0	-17.4	-0.1	17.6	0.0	34.4	-0.0	-10.1	0.2				
Earthquake X Mode 1	9.3	1.9	-34.0					1.6	-30.1	0.5	8.5	-2.8	55.9	1.5	-17.5	1.3				
Earthquake X Mode 2	43.7	-5.4	17.0					-4.4	13.6	0.8	42.1	7.5	-23.4	-4.2	7.9	0.6				
Earthquake X Mode 3	-22.8	0.2	18.9					0.2	17.1	0.1	-21.6	-0.3	-32.0	0.1	9.8	-0.2				
Earthquake X Mode 4	-4.2	-0.2	5.3					-0.1	1.4	-0.0	-3.6	-0.1	0.8	-0.0	0.3	-0.1				
Earthquake X Mode 5	-12.8	0.6	1.7					0.2	0.1	-0.0	-12.3	0.2	1.3	0.0	0.0	-0.0				
Earthquake X Mode 6	3.4	-0.0	-2.1					-0.0	-0.5	-0.0	3.2	0.0	-0.5	-0.0	-0.1	0.0				
Earthquake X Mode 7	0.3	-0.1	4.4					-0.1	3.5	-0.0	0.2	0.1	-5.7	-0.1	2.4	-0.0				
Earthquake X Mode 8	-0.8	-0.1	-3.5					-0.0	-2.7	-0.0	-0.7	0.1	4.4	-0.0	-2.0	0.0				
Earthquake X Mode 9	-1.0	-0.3	0.9					-0.2	0.8	0.0	-1.0	0.4	-1.4	-0.3	0.5	0.0				
Earthquake Y Mode 1	4.2	0.9	-15.4					0.7	-13.7	0.2	3.9	-1.3	25.3	0.7	-7.9	0.6				
Earthquake Y Mode 2	13.5	-1.7	5.2					-1.4	4.2	0.2	13.0	2.3	-7.2	-1.3	2.5	0.2				
Earthquake Y Mode 3	-140.2	1.4	116.6					1.1	105.0	0.6	-132.8	-1.7	-197.2	0.9	60.5	-1.5				
Earthquake Y Mode 4	-0.8	-0.0	1.0					-0.0	0.3	-0.0	-0.7	-0.0	0.2	-0.0	0.1	-0.0				
Earthquake Y Mode 5	-2.3	0.1	0.3					0.0	0.0	-0.0	-2.2	0.0	0.2	0.0	0.0	-0.0				
Earthquake Y Mode 6	28.2	-0.1	-17.2					-0.1	-4.0	-0.1	25.9	0.0	-3.8	-0.0	-1.1	0.1				
Earthquake Y Mode 7	0.1	-0.0	1.3					-0.0	1.0	-0.0	0.1	0.0	-1.7	-0.0	0.7	-0.0				
Earthquake Y Mode 8	-2.0	-0.1	-8.6					-0.1	-6.8	-0.0	-1.8	0.1	11.1	-0.1	-4.9	0.0				
Earthquake Y Mode 9	-0.4	-0.1	0.3					-0.1	0.3	0.0	-0.4	0.1	-0.5	-0.1	0.2	0.0				
	Floor 2	30.0	3.00/6.00					Self weight	170.7	0.6	5.5	0.7	6.1	-0.1	147.0	-1.2	-12.6	0.2	0.5	0.0
								Dead load	38.3	0.1	3.0	0.1	2.3	-0.0	37.2	-0.2	-3.9	0.0	0.8	0.0
								Live load	38.6	0.3	2.4	0.3	2.9	-0.1	38.1	-0.6	-6.5	0.1	-0.2	0.1
								Wind +X ecc.+	-6.3	0.6	-1.6	0.4	-1.3	-0.0	-6.0	-0.7	2.2	0.4	-0.7	0.0
								Wind +X ecc.-	-3.7	0.6	-4.4	0.4	-3.6	0.0	-3.6	-0.7	6.2	0.4	-2.0	0.1
								Wind -X ecc.+	6.3	-0.6	1.6	-0.4	1.3	0.0	6.0	0.7	-2.2	-0.4	0.7	-0.0
								Wind -X ecc.-	3.7	-0.6	4.4	-0.4	3.6	-0.0	3.6	0.7	-6.2	-0.4	2.0	-0.1
				Wind +Y ecc.+	-23.1	0.1	17.4	0.1	13.9	0.3	-21.8	-0.1	-24.1	0.1	8.1	0.0				
				Wind +Y ecc.-	-34.6	-0.0	30.4	-0.0	24.5	0.1	-32.7	0.0	-42.7	-0.0	14.3	-0.3				
				Wind -Y ecc.+	23.1	-0.1	-17.4	-0.1	-13.9	-0.3	21.8	0.1	24.1	-0.1	-8.1	-0.0				
				Wind -Y ecc.-	34.6	0.0	-30.4	0.0	-24.5	-0.1	32.7	-0.0	42.7	0.0	-14.3	0.3				
				Earthquake X Mode 1	16.3	2.4	-47.4	1.7	-36.4	0.5	14.7	-2.5	61.7	1.5	-20.8	1.4				
				Earthquake X Mode 2	67.6	-6.4	18.3	-4.4	14.7	0.8	65.2	6.5	-25.3	-3.9	8.1	0.5				
				Earthquake X Mode 3	-38.4	0.2	28.3	0.1	21.1	0.1	-36.2	-0.2	-35.0	0.1	12.1	-0.3				
				Earthquake X Mode 4	-3.7	0.1	-3.2	0.1	-4.6	0.0	-3.3	-0.3	10.0	0.2	-3.3	0.1				
				Earthquake X Mode 5	-9.9	-0.3	0.5	-0.4	-0.4	0.1	-9.5	0.9	1.5	-0.5	-0.4	0.1				
				Earthquake X Mode 6	2.8	-0.0	1.0	0.0	1.6	0.0	2.6	-0.0	-3.6	0.0	1.2	-0.0				
				Earthquake X Mode 7	-0.4	-0.1	2.4	-0.0	0.6	0.0	-0.2	-0.0	0.5	0.0	0.1	-0.0				
				Earthquake X Mode 8	0.3	-0.0	-2.1	-0.0	-0.5	-0.0	0.1	-0.0	-0.6	0.0	-0.1	0.0				
				Earthquake X Mode 9	-0.3	-0.2	0.4	-0.0	0.3	0.0	-0.3	-0.1	-0.4	0.0	0.1	-0.0				
				Earthquake Y Mode 1	7.4	1.1	-21.5	0.8	-16.5	0.2	6.7	-1.1	28.0	0.7	-9.4	0.6				
				Earthquake Y Mode 2	20.9	-2.0	5.7	-1.4	4.5	0.2	20.1	2.0	-7.8	-1.2	2.5	0.2				
				Earthquake Y Mode 3	-236.3	1.2	174.5	0.9	129.8	0.8	-223.0	-1.2	-215.2	0.7	74.6	-1.9				
				Earthquake Y Mode 4	-0.7	0.0	-0.6	0.0	-0.9	0.0	-0.6	-0.1	1.9	0.0	-0.6	0.0				
Earthquake Y Mode 5	-1.8	-0.0	0.1	-0.1	-0.1	0.0	-1.7	0.2	0.3	-0.1	-0.1	0.0								
Earthquake Y Mode 6	22.8	-0.0	7.9	0.0	13.3	0.0	21.3	-0.1	-29.8	0.0	9.7	-0.0								
Earthquake Y Mode 7	-0.1	-0.0	0.7	-0.0	0.2	0.0	-0.1	-0.0	0.2	0.0	0.0	-0.0								
Earthquake Y Mode 8	0.8	-0.1	-5.4	-0.0	-1.2	-0.0	0.3	-0.1	-1.5	0.0	-0.3	0.0								
Earthquake Y Mode 9	-0.1	-0.1	0.1	-0.0	0.1	0.0	-0.1	-0.0	-0.2	0.0	0.0	0.0								



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	30.0	0.00/3.00	Self weight	187.7	-0.0	7.0	-0.0	3.4	-0.1	163.6	0.2	-2.4	-0.3	-0.1	0.1
				Dead load	38.0	0.0	2.4	0.0	1.2	-0.0	37.0	0.0	-0.9	-0.0	0.2	0.0
				Live load	32.3	-0.0	3.8	-0.0	1.5	-0.1	32.1	0.1	-0.8	-0.2	-0.5	0.1
				Wind +X ecc.+	-9.2	1.0	-0.6	0.5	-0.8	-0.0	-8.9	-0.4	1.7	0.4	-0.3	0.0
				Wind +X ecc.-	-5.2	1.1	-6.6	0.5	-4.0	-0.0	-5.1	-0.4	5.2	0.4	-2.3	0.1
				Wind -X ecc.+	9.2	-1.0	0.6	-0.5	0.8	0.0	8.9	0.4	-1.7	-0.4	0.3	-0.0
				Wind -X ecc.-	5.2	-1.1	6.6	-0.5	4.0	0.0	5.1	0.4	-5.2	-0.4	2.3	-0.1
				Wind +Y ecc.+	-36.3	0.1	37.8	0.1	19.5	0.2	-34.1	-0.0	-20.3	0.0	12.5	-0.1
				Wind +Y ecc.-	-54.9	-0.2	65.5	-0.1	34.3	0.1	-51.5	0.1	-36.6	-0.1	21.9	-0.4
				Wind -Y ecc.+	36.3	-0.1	-37.8	-0.1	-19.5	-0.2	34.1	0.0	20.3	-0.0	-12.5	0.1
				Wind -Y ecc.-	54.9	0.2	-65.5	0.1	-34.3	-0.1	51.5	-0.1	36.6	0.1	-21.9	0.4
				Earthquake X Mode 1	26.4	3.8	-77.0	1.7	-41.3	0.2	23.6	-1.3	46.5	1.4	-25.1	1.1
				Earthquake X Mode 2	91.7	-9.1	10.7	-4.3	9.4	0.5	88.5	3.3	-17.4	-3.5	4.2	0.2
				Earthquake X Mode 3	-55.7	0.2	50.9	0.1	25.5	0.1	-52.3	-0.0	-25.6	0.0	15.9	-0.3
				Earthquake X Mode 4	-1.4	0.5	-13.5	0.3	-8.1	0.0	-1.5	-0.3	10.4	0.3	-5.4	0.1
				Earthquake X Mode 5	-4.5	-1.3	-3.6	-0.7	-1.6	0.1	-4.4	0.7	1.0	-0.7	-1.3	0.1
				Earthquake X Mode 6	1.1	0.0	5.1	0.0	3.0	0.0	1.1	0.0	-3.6	0.0	2.0	-0.0
				Earthquake X Mode 7	0.4	0.1	-5.2	0.1	-3.6	0.0	0.5	-0.1	5.1	0.1	-2.7	0.0
				Earthquake X Mode 8	-0.7	0.1	4.4	0.0	3.0	0.0	-0.8	-0.1	-4.2	0.1	2.3	-0.0
				Earthquake X Mode 9	-0.8	0.4	-0.8	0.3	-0.6	-0.0	-0.7	-0.4	1.0	0.3	-0.5	-0.0
				Earthquake Y Mode 1	12.0	1.7	-34.9	0.8	-18.7	0.1	10.7	-0.6	21.1	0.6	-11.4	0.5
				Earthquake Y Mode 2	28.3	-2.8	3.3	-1.3	2.9	0.2	27.3	1.0	-5.4	-1.1	1.3	0.1
				Earthquake Y Mode 3	-342.6	1.0	313.3	0.5	157.2	0.7	-321.8	-0.2	-157.3	0.3	98.1	-1.9
				Earthquake Y Mode 4	-0.3	0.1	-2.6	0.1	-1.6	0.0	-0.3	-0.1	2.0	0.0	-1.0	0.0
				Earthquake Y Mode 5	-0.8	-0.2	-0.7	-0.1	-0.3	0.0	-0.8	0.1	0.2	-0.1	-0.2	0.0
				Earthquake Y Mode 6	8.9	0.1	42.2	0.0	24.7	0.1	9.1	0.0	-30.0	0.0	16.8	-0.2
				Earthquake Y Mode 7	0.1	0.0	-1.6	0.0	-1.1	0.0	0.1	-0.0	1.5	0.0	-0.8	0.0
				Earthquake Y Mode 8	-1.8	0.2	11.0	0.1	7.5	0.0	-2.0	-0.2	-10.4	0.1	5.7	-0.0
				Earthquake Y Mode 9	-0.3	0.2	-0.3	0.1	-0.2	-0.0	-0.3	-0.1	0.4	0.1	-0.2	-0.0
				W7	techo	30.0	12.00/15.00	Self weight	35.7	-0.8	24.1	-0.3	19.7	-0.1	15.2	0.2
Dead load	17.9	-1.4	2.2					-1.5	2.7	0.1	16.4	3.3	-5.2	-2.4	1.0	-0.1
Live load	15.4	-0.4	9.1					-0.3	9.6	-0.0	13.6	0.4	-18.2	-0.4	4.1	-0.1
Wind +X ecc.+	-0.0	0.3	1.8					0.3	1.6	-0.0	-0.1	-0.7	-2.8	0.5	1.1	0.0
Wind +X ecc.-	0.2	0.3	1.8					0.3	1.4	-0.0	0.1	-0.7	-2.1	0.5	1.0	0.0
Wind -X ecc.+	0.0	-0.3	-1.8					-0.3	-1.6	0.0	0.1	0.7	2.8	-0.5	-1.1	-0.0
Wind -X ecc.-	-0.2	-0.3	-1.8					-0.3	-1.4	0.0	-0.1	0.7	2.1	-0.5	-1.0	-0.0
Wind +Y ecc.+	-1.3	0.0	1.3					0.0	3.1	0.1	-1.4	-0.1	-7.5	0.1	1.7	0.1
Wind +Y ecc.-	-2.1	0.0	1.5					0.0	4.3	-0.1	-2.3	-0.0	-10.8	0.0	2.2	-0.1
Wind -Y ecc.+	1.3	-0.0	-1.3					-0.0	-3.1	-0.1	1.4	0.1	7.5	-0.1	-1.7	-0.1
Wind -Y ecc.-	2.1	-0.0	-1.5					-0.0	-4.3	0.1	2.3	0.0	10.8	-0.0	-2.2	0.1
Earthquake X Mode 1	5.1	1.2	3.3					1.3	-0.2	0.5	4.9	-3.0	4.0	2.1	0.8	0.7
Earthquake X Mode 2	-1.9	-4.0	-23.4					-4.3	-19.9	0.8	-1.2	9.7	33.4	-6.6	-13.5	0.4
Earthquake X Mode 3	-3.3	0.2	4.8					0.2	7.1	-0.1	-3.5	-0.3	-15.5	0.2	4.1	-0.1
Earthquake X Mode 4	-4.5	-0.4	4.8					-0.3	4.2	-0.1	-4.3	0.7	-7.4	-0.5	2.7	-0.2
Earthquake X Mode 5	2.4	1.2	5.5					1.1	4.8	-0.2	2.1	-2.3	-8.3	1.7	3.2	-0.1
Earthquake X Mode 6	1.1	-0.0	-2.4					-0.0	-2.2	0.0	1.1	0.1	3.9	-0.0	-1.4	0.0
Earthquake X Mode 7	2.1	0.1	-4.4					0.1	-3.0	0.0	2.1	-0.2	4.1	0.2	-2.0	0.0
Earthquake X Mode 8	-1.0	0.1	4.1					0.1	2.8	-0.0	-1.1	-0.1	-4.0	0.1	1.9	-0.0
Earthquake X Mode 9	1.6	0.5	-0.1					0.4	0.1	-0.0	1.5	-0.6	-0.2	0.5	0.0	-0.0
Earthquake Y Mode 1	2.3	0.5	1.5					0.6	-0.1	0.2	2.2	-1.4	1.8	0.9	0.3	0.3
Earthquake Y Mode 2	-0.6	-1.2	-7.2					-1.3	-6.1	0.2	-0.4	3.0	10.3	-2.0	-4.2	0.1
Earthquake Y Mode 3	-20.3	1.0	29.5					1.0	43.6	-0.5	-21.7	-2.0	-95.7	1.3	25.0	-0.5
Earthquake Y Mode 4	-0.9	-0.1	0.9					-0.1	0.8	-0.0	-0.8	0.1	-1.4	-0.1	0.5	-0.0
Earthquake Y Mode 5	0.4	0.2	1.0					0.2	0.9	-0.0	0.4	-0.4	-1.5	0.3	0.6	-0.0
Earthquake Y Mode 6	9.0	-0.3	-19.8					-0.2	-18.1	0.1	9.1	0.4	32.1	-0.3	-11.5	0.1
Earthquake Y Mode 7	0.6	0.0	-1.3					0.0	-0.9	0.0	0.6	-0.1	1.2	0.0	-0.6	0.0
Earthquake Y Mode 8	-2.6	0.3	10.2					0.2	7.0	-0.0	-2.6	-0.3	-10.1	0.3	4.8	-0.0
Earthquake Y Mode 9	0.6	0.2	-0.0					0.1	0.0	-0.0	0.6	-0.2	-0.1	0.2	0.0	-0.0
Floor 4	30.0	9.00/12.00	Self weight		88.7	-1.1	12.3	-0.9	9.8	-0.1	67.8	1.5	-19.4	-0.6	1.9	0.1
			Dead load		30.2	-0.6	3.3	-0.4	2.7	-0.0	28.9	0.6	-4.8	-0.2	1.3	0.0
			Live load		23.7	-0.5	6.3	-0.4	5.0	-0.0	23.8	0.6	-9.7	-0.2	0.9	0.0
			Wind +X ecc.+		-0.9	0.3	1.9	0.3	1.4	-0.0	-0.9	-0.5	-2.5	0.2	0.8	0.0
			Wind +X ecc.-		-0.2	0.3	1.3	0.3	0.7	0.0	-0.2	-0.5	-0.8	0.3	0.4	0.1
			Wind -X ecc.+		0.9	-0.3	-1.9	-0.3	-1.4	0.0	0.9	0.5	2.5	-0.2	-0.8	-0.0
			Wind -X ecc.-		0.2	-0.3	-1.3	-0.3	-0.7	-0.0	0.2	0.5	0.8	-0.3	-0.4	-0.1
			Wind +Y ecc.+		-4.9	0.1	5.8	0.1	7.1	0.0	-4.6	-0.1	-15.3	0.1	4.2	0.2
			Wind +Y ecc.-		-8.2	0.0	8.1	0.0	10.5	-0.1	-7.6	-0.0	-23.1	0.0	6.2	0.0
			Wind -Y ecc.+		4.9	-0.1	-5.8	-0.1	-7.1	-0.0	4.6	0.1	15.3	-0.1	-4.2	-0.2
			Wind -Y ecc.-		8.2	-0.0	-8.1	-0.0	-10.5	0.1	7.6	0.0	23.1	-0.0	-6.2	-0.0
			Earthquake X Mode 1		12.2	1.3	-3.8	1.3	-7.4	0.7	11.5	-2.4	17.9	1.1	-4.2	0.9
			Earthquake X Mode 2		8.3	-4.0	-19.4	-3.5	-14.0	0.9	7.8	6.1	23.0	-2.9	-7.9	0.2
			Earthquake X Mode 3		-10.9	0.2	11.8	0.1	12.6	-0.2	-10.2	-0.2	-25.8	0.1	7.4	0.1
			Earthquake X Mode 4		-8.1	-0.4	7.1	-0.2	4.1	-0.1	-7.7	0.2	-5.2	-0.1	2.4	-0.1
			Earthquake X Mode 5		0.9	1.1	4.4	0.6	3.0	-0.1	0.9	-0.6	-4.8	0.4	1.6	0.0
			Earthquake X Mode 6		2.5	-0.0	-3.4	-0.0	-2.1	0.0	2.3	0.0	2.8	-0.0	-1.2	-0.0
			Earthquake X Mode 7		2.7	0.0	-1.4	-0.0	0.4	0.0	2.5	0.1	-2.3	-0.0	0.5	-0.0
			Earthquake X Mode 8		-1.6	0.0	1.3	-0.0	-0.3	-0.0	-1.5	0.1	1.9	-0.0	-0.4	0.0
			Earthquake X Mode 9		1.6	0.1	-0.5	-0.1	-0.1	0.0	1.6	0.3	-0.1	-0.1	-0.1	0.0
			Earthquake Y Mode 1		5.6	0.6	-1.7	0.6	-3.4	0.3	5.2	-1.1	8.1	0.5	-1.9	0.4
			Earthquake Y Mode 2		2.6	-1.2	-6.0	-1.1	-4.3	0.3	2.4	1.9	7.1	-0.9	-2.4	0.1
Earthquake Y Mode 3	-67.0	1.1	72.4	0.9	77.7	-1.1	-62.9	-1.4	-158.7	0.8	45.8	0.4				
Earthquake Y Mode 4	-1.6	-0.1	1.4	-0.0	0.8	-0.0	-1.5	0.0	-1.0	-0.0	0.5	-0.0				
Earthquake Y Mode 5	0.2	0.2	0.8	0.1	0.5	-0.0	0.2	-0.1	-0.9	0.1	0.3	0.0				
Earthquake Y Mode 6	20.5	-0.2	-27.6	-0.1	-17.0	0.2	19.3	0.2	23.4	-0.1	-9.9	-0.2				
Earthquake Y Mode 7	0.8	0.0	-0.4	-0.0	0.1	0.0	0.8	0.0	-0.7	-0.0	0.2	-0.0				
Earthquake Y Mode 8	-3.9	0.0	3.2	-0.0	-0.7	-0.0	-3.7	0.1	4.8	-0.1	-1.1	0.0				
Earthquake Y Mode 9	0.6	0.0	-0.2	-0.0	-0.1	0.0	0.6	0.1	-0.0	-0.0	-0.0	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 3	30.0	6.00/9.00	Self weight	133.2	-0.7	10.3	-0.5	9.7	-0.1	110.9	0.8	-20.2	-0.2	2.9	0.0				
				Dead load	42.7	-0.7	2.3	-0.6	1.7	-0.0	40.9	0.9	-3.0	-0.5	0.5	0.0				
				Live load	31.3	-0.4	5.0	-0.3	4.7	-0.0	31.1	0.4	-9.9	-0.1	1.0	-0.0				
				Wind +X ecc.+	-1.2	0.5	2.1	0.4	1.7	-0.0	-1.1	-0.7	-2.9	0.4	1.0	0.0				
				Wind +X ecc.-	0.6	0.5	0.8	0.4	0.4	0.0	0.5	-0.7	-0.3	0.4	0.2	0.1				
				Wind -X ecc.+	1.2	-0.5	-2.1	-0.4	-1.7	0.0	1.1	0.7	2.9	-0.4	-1.0	-0.0				
				Wind -X ecc.-	-0.6	-0.5	-0.8	-0.4	-0.4	-0.0	-0.5	0.7	0.3	-0.4	-0.2	-0.1				
				Wind +Y ecc.+	-11.4	0.1	11.4	0.1	11.2	0.0	-10.8	-0.2	-21.9	0.1	6.6	0.3				
				Wind +Y ecc.-	-19.4	0.1	17.1	0.0	17.1	-0.2	-18.3	-0.1	-33.9	0.0	10.0	0.1				
				Wind -Y ecc.+	11.4	-0.1	-11.4	-0.1	-11.2	-0.0	10.8	0.2	21.9	-0.1	-6.6	-0.3				
				Wind -Y ecc.-	19.4	-0.1	-17.1	-0.0	-17.1	0.2	18.3	0.1	33.9	-0.0	-10.0	-0.1				
				Earthquake X Mode 1	28.1	2.0	-13.7	1.7	-13.7	0.9	26.6	-2.9	26.9	1.5	-7.8	1.0				
				Earthquake X Mode 2	10.9	-5.8	-18.1	-4.7	-14.3	1.0	10.4	7.8	25.3	-4.1	-8.6	0.2				
				Earthquake X Mode 3	-22.6	0.3	20.0	0.2	17.9	-0.3	-21.4	-0.3	-33.3	0.2	10.4	0.1				
				Earthquake X Mode 4	-9.9	-0.2	4.7	-0.1	0.9	-0.0	-9.5	-0.1	1.7	-0.0	0.2	-0.0				
				Earthquake X Mode 5	-0.2	0.6	1.9	0.2	0.9	-0.0	-0.1	0.2	-1.0	-0.0	0.3	0.0				
				Earthquake X Mode 6	3.2	-0.0	-2.1	-0.0	-0.5	0.0	3.1	-0.0	-0.4	0.0	-0.1	-0.0				
				Earthquake X Mode 7	1.0	-0.1	3.8	-0.1	3.0	-0.0	1.0	0.1	-4.9	-0.1	2.1	-0.0				
				Earthquake X Mode 8	-0.5	-0.1	-3.6	-0.1	-2.9	0.0	-0.5	0.1	4.7	-0.1	-2.1	-0.0				
				Earthquake X Mode 9	0.8	-0.3	0.3	-0.2	0.2	0.0	0.8	0.4	-0.4	-0.3	0.2	0.0				
				Earthquake Y Mode 1	12.8	0.9	-6.2	0.8	-6.2	0.4	12.1	-1.3	12.2	0.7	-3.5	0.5				
				Earthquake Y Mode 2	3.4	-1.8	-5.6	-1.5	-4.4	0.3	3.2	2.4	7.8	-1.3	-2.6	0.1				
				Earthquake Y Mode 3	-139.2	1.6	123.0	1.2	109.9	-1.5	-131.5	-1.9	-205.2	1.1	63.8	0.7				
				Earthquake Y Mode 4	-1.9	-0.0	0.9	-0.0	0.2	-0.0	-1.8	-0.0	0.3	-0.0	0.0	-0.0				
				Earthquake Y Mode 5	-0.0	0.1	0.4	0.0	0.2	-0.0	-0.0	0.0	-0.2	-0.0	0.1	0.0				
				Earthquake Y Mode 6	26.7	-0.0	-17.2	-0.0	-4.1	0.1	25.5	-0.0	-3.5	0.0	-1.2	-0.1				
				Earthquake Y Mode 7	0.3	-0.0	1.1	-0.0	0.9	-0.0	0.3	0.0	-1.5	-0.0	0.6	-0.0				
				Earthquake Y Mode 8	-1.2	-0.2	-9.1	-0.1	-7.2	0.0	-1.3	0.2	11.8	-0.2	-5.1	-0.0				
				Earthquake Y Mode 9	0.3	-0.1	0.1	-0.1	0.1	0.0	0.3	0.1	-0.1	-0.1	0.1	0.0				
					Floor 2	30.0	3.00/6.00	Self weight	167.5	-0.0	5.8	-0.1	6.4	-0.0	144.0	0.3	-14.6	0.1	0.9	0.0
								Dead load	54.3	-0.6	2.0	-0.5	1.4	-0.0	52.1	0.7	-2.4	-0.4	0.5	0.0
								Live load	34.3	-0.0	2.6	-0.1	3.0	0.0	34.0	0.2	-7.3	0.0	0.1	-0.0
								Wind +X ecc.+	-0.8	0.6	1.9	0.5	1.6	-0.0	-0.7	-0.7	-2.9	0.4	0.9	0.0
								Wind +X ecc.-	2.5	0.6	-0.4	0.5	-0.3	0.0	2.4	-0.7	0.4	0.4	-0.2	0.1
								Wind -X ecc.+	0.8	-0.6	-1.9	-0.5	-1.6	0.0	0.7	0.7	2.9	-0.4	-0.9	-0.0
								Wind -X ecc.-	-2.5	-0.6	0.4	-0.5	0.3	-0.0	-2.4	0.7	-0.4	-0.4	0.2	-0.1
Wind +Y ecc.+	-21.0	0.2	19.3					0.1	15.3	-0.0	-19.9	-0.2	-26.5	0.1	9.0	0.3				
Wind +Y ecc.-	-36.1	0.1	29.8					0.1	24.0	-0.3	-34.2	-0.1	-41.8	0.1	14.1	0.1				
Wind -Y ecc.+	21.0	-0.2	-19.3					-0.1	-15.3	0.0	19.9	0.2	26.5	-0.1	-9.0	-0.3				
Wind -Y ecc.-	36.1	-0.1	-29.8					-0.1	-24.0	0.3	34.2	0.1	41.8	-0.1	-14.1	-0.1				
Earthquake X Mode 1	51.8	2.4	-26.8					1.7	-19.9	1.0	49.2	-2.5	32.4	1.4	-11.4	1.0				
Earthquake X Mode 2	6.0	-6.9	-12.4					-4.8	-11.3	1.0	6.0	6.9	22.0	-3.9	-6.5	0.2				
Earthquake X Mode 3	-37.7	0.3	29.0					0.2	21.7	-0.3	-35.8	-0.3	-35.9	0.2	12.5	0.2				
Earthquake X Mode 4	-7.8	0.0	-1.9					0.1	-3.6	0.1	-7.6	-0.3	8.3	0.2	-2.6	0.1				
Earthquake X Mode 5	-1.4	-0.3	-1.6					-0.4	-1.7	0.1	-1.3	1.0	3.3	-0.5	-1.3	0.0				
Earthquake X Mode 6	2.7	0.0	1.0					0.0	1.6	-0.0	2.6	-0.0	-3.7	0.0	1.2	0.0				
Earthquake X Mode 7	-0.2	-0.1	2.3					-0.0	0.5	-0.0	-0.2	-0.0	0.7	0.0	0.1	0.0				
Earthquake X Mode 8	0.3	-0.0	-2.1					-0.0	-0.5	0.0	0.3	-0.0	-0.5	0.0	-0.1	-0.0				
Earthquake X Mode 9	0.1	-0.2	0.5					-0.0	0.1	0.0	0.1	-0.1	0.2	0.0	0.1	-0.0				
Earthquake Y Mode 1	23.5	1.1	-12.2					0.8	-9.0	0.4	22.3	-1.1	14.7	0.7	-5.2	0.4				
Earthquake Y Mode 2	1.9	-2.1	-3.8					-1.5	-3.5	0.3	1.8	2.1	6.8	-1.2	-2.0	0.1				
Earthquake Y Mode 3	-232.1	2.0	178.5					1.4	133.4	-1.8	-220.5	-2.0	-221.0	1.2	77.1	0.9				
Earthquake Y Mode 4	-1.5	0.0	-0.4					0.0	-0.7	0.0	-1.5	-0.1	1.6	0.0	-0.5	0.0				
Earthquake Y Mode 5	-0.3	-0.1	-0.3					-0.1	-0.3	0.0	-0.2	0.2	0.6	-0.1	-0.2	0.0				
Earthquake Y Mode 6	22.2	0.2	8.4					0.2	13.5	-0.1	21.6	-0.3	-30.2	0.2	9.8	0.0				
Earthquake Y Mode 7	-0.1	-0.0	0.7					-0.0	0.1	-0.0	-0.0	-0.0	0.2	0.0	0.0	0.0				
Earthquake Y Mode 8	0.8	-0.1	-5.3					-0.0	-1.2	0.0	0.7	-0.0	-1.2	0.0	-0.3	-0.0				
Earthquake Y Mode 9	0.0	-0.1	0.2					-0.0	0.0	0.0	0.0	-0.0	0.1	0.0	0.0	-0.0				
	Floor 1	30.0	0.00/3.00					Self weight	182.7	0.2	6.9	0.2	3.3	0.0	158.9	-0.3	-4.0	0.3	-0.1	-0.1
								Dead load	62.9	-0.2	2.0	-0.3	0.8	-0.0	60.5	0.5	-0.5	-0.2	0.2	0.0
								Live load	26.5	0.1	3.7	0.1	1.4	0.0	26.6	-0.2	-1.2	0.1	-0.4	-0.1
								Wind +X ecc.+	0.2	1.0	1.1	0.5	1.0	-0.0	0.2	-0.4	-1.9	0.4	0.5	0.0
								Wind +X ecc.-	5.5	1.1	-4.3	0.5	-1.8	0.0	5.2	-0.5	1.0	0.4	-1.3	0.1
								Wind -X ecc.+	-0.2	-1.0	-1.1	-0.5	-1.0	0.0	-0.2	0.4	1.9	-0.4	-0.5	-0.0
								Wind -X ecc.-	-5.5	-1.1	4.3	-0.5	1.8	-0.0	-5.2	0.5	-1.0	-0.4	1.3	-0.1
				Wind +Y ecc.+	-33.0	0.2	39.2	0.1	20.5	-0.1	-31.3	-0.1	-21.8	0.1	13.1	0.3				
				Wind +Y ecc.-	-57.1	-0.1	64.3	0.0	33.6	-0.3	-54.3	-0.1	-35.4	-0.0	21.6	0.2				
				Wind -Y ecc.+	33.0	-0.2	-39.2	-0.1	-20.5	0.1	31.3	0.1	21.8	-0.1	-13.1	-0.3				
				Wind -Y ecc.-	57.1	0.1	-64.3	-0.0	-33.6	0.3	54.3	0.1	35.4	0.0	-21.6	-0.2				
				Earthquake X Mode 1	79.8	3.8	-62.5	1.7	-30.1	0.6	76.1	-1.2	26.7	1.4	-19.5	0.6				
				Earthquake X Mode 2	-3.9	-9.3	-0.7	-4.5	-4.8	0.6	-3.5	3.6	14.4	-3.4	-2.1	-0.0				
				Earthquake X Mode 3	-54.3	0.2	50.5	0.2	25.6	-0.2	-51.8	-0.2	-25.8	0.1	16.0	0.2				
				Earthquake X Mode 4	-2.9	0.5	-11.8	0.2	-6.8	0.1	-3.0	-0.2	8.2	0.2	-4.6	0.0				
				Earthquake X Mode 5	-2.5	-1.3	-4.6	-0.7	-3.0	0.1	-2.4	0.8	4.2	-0.7	-2.0	-0.0				
				Earthquake X Mode 6	1.1	0.0	5.1	0.0	3.0	-0.0	1.2	-0.0	-3.7	0.0	2.0	0.0				
				Earthquake X Mode 7	0.9	0.1	-4.8	0.1	-3.2	0.0	0.8	-0.1	4.5	0.1	-2.5	0.0				
				Earthquake X Mode 8	-0.5	0.1	4.5	0.1	3.1	-0.0	-0.5	-0.1	-4.3	0.1	2.3	0.0				
				Earthquake X Mode 9	0.5	0.4	-0.7	0.3	-0.4	-0.0	0.5	-0.4	0.5	0.3	-0.3	-0.0				
				Earthquake Y Mode 1	36.2	1.7	-28.3	0.8	-13.7	0.3	34.5	-0.6	12.1	0.6	-8.8	0.3				
				Earthquake Y Mode 2	-1.2	-2.9	-0.2	-1.4	-1.5	0.2	-1.1	1.1	4.4	-1.1	-0.6	-0.0				
				Earthquake Y Mode 3	-334.5	1.5	311.1	0.9	157.4	-1.5	-318.9	-1.2	-158.5	0.7	98.5	1.2				
				Earthquake Y Mode 4	-0.6	0.1	-2.3	0.0	-1.3	0.0	-0.6	-0.0	1.6	0.0	-0.9	0.0				
				Earthquake Y Mode 5	-0.4	-0.2	-0.8	-0.1	-0.5	0.0	-0.4	0.2	0.8	-0.1	-0.4	-0.0				
				Earthquake Y Mode 6	9.4	0.2	42.1	0.2	24.7	-0.1	9.6	-0.2	-30.5	0.1	16.7	0.2				
				Earthquake Y Mode 7	0.3	0.0	-1.4	0.0	-1.0	0.0	0.3	-0.0	1.4	0.0	-0.7	0.0				
				Earthquake Y Mode 8	-1.3	0.2	11.2	0.1	7.6	-0.0	-1.2	-0.2	-10.8	0.2	5.8	0.0				
				Earthquake Y Mode 9	0.2	0.2	-0.2	0.1	-0.2	-0.0	0.2	-0.1	0.2	0.1	-0.1	-0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
W8	techo	30.0	12.00/15.00	Self weight	41.8	-1.5	5.4	-1.0	3.3	0.1	20.7	1.8	-4.0	-1.6	1.9	0.2			
				Dead load	6.1	-1.6	-1.0	-1.4	0.1	0.0	5.8	2.7	-1.2	-2.0	0.1	0.2			
				Live load	5.6	-0.8	-0.2	-0.5	-0.1	0.0	5.5	0.8	0.2	-0.8	-0.3	0.1			
				Wind +X ecc.+	2.2	1.2	1.5	1.0	1.4	-0.1	1.7	-2.0	-2.3	1.6	0.9	-0.2			
				Wind +X ecc.-	2.6	1.2	1.1	1.0	0.7	-0.1	2.2	-1.9	-0.9	1.5	0.5	-0.1			
				Wind -X ecc.+	-2.2	-1.2	-1.5	-1.0	-1.4	0.1	-1.7	2.0	2.3	-1.6	-0.9	0.2			
				Wind -X ecc.-	-2.6	-1.2	-1.1	-1.0	-0.7	0.1	-2.2	1.9	0.9	-1.5	-0.5	0.1			
				Wind +Y ecc.+	-3.0	0.3	3.6	0.2	5.3	0.0	-3.2	-0.4	-11.7	0.4	3.1	-0.0			
				Wind +Y ecc.-	-5.0	0.4	5.7	0.3	8.3	-0.1	-5.3	-0.5	-18.2	0.5	4.9	-0.2			
				Wind -Y ecc.+	3.0	-0.3	-3.6	-0.2	-5.3	-0.0	3.2	0.4	11.7	-0.4	-3.1	0.0			
				Wind -Y ecc.-	5.0	-0.4	-5.7	-0.3	-8.3	0.1	5.3	0.5	18.2	-0.5	-4.9	0.2			
				Earthquake X Mode 1	12.6	4.1	-4.5	3.4	-7.7	0.3	11.6	-6.6	17.9	5.2	-4.5	0.2			
				Earthquake X Mode 2	-25.9	-16.9	-19.9	-13.9	-16.6	1.4	-20.6	27.1	27.1	-21.5	-10.6	2.5			
				Earthquake X Mode 3	-3.7	1.0	9.0	0.8	11.3	-0.2	-4.4	-1.4	-23.3	1.2	6.8	-0.3			
				Earthquake X Mode 4	0.7	-0.8	6.1	-0.7	5.6	-0.1	0.3	1.3	-10.0	-1.0	3.5	-0.1			
				Earthquake X Mode 5	-0.8	3.9	5.5	3.1	4.9	-0.3	-1.6	-5.9	-8.6	4.8	3.2	-0.6			
				Earthquake X Mode 6	-0.2	-0.1	-2.8	-0.1	-2.6	0.0	0.1	0.2	4.7	-0.2	-1.6	0.0			
				Earthquake X Mode 7	-1.1	0.2	-4.5	0.1	-3.2	0.0	-0.8	-0.2	4.6	0.2	-2.1	0.0			
				Earthquake X Mode 8	0.5	0.2	4.1	0.2	3.0	-0.0	0.3	-0.3	-4.4	0.2	2.0	-0.0			
				Earthquake X Mode 9	-1.3	0.9	-0.1	0.7	0.0	-0.1	-1.4	-1.3	-0.2	1.1	0.0	-0.1			
				Earthquake Y Mode 1	5.7	1.8	-2.0	1.5	-3.5	0.2	5.3	-3.0	8.1	2.4	-2.0	0.1			
				Earthquake Y Mode 2	-8.0	-5.2	-6.2	-4.3	-5.1	0.4	-6.4	8.4	8.4	-6.6	-3.3	0.8			
				Earthquake Y Mode 3	-22.9	6.0	55.7	4.7	69.4	-1.0	-27.1	-8.9	-143.5	7.4	41.8	-1.6			
				Earthquake Y Mode 4	0.1	-0.2	1.2	-0.1	1.1	-0.0	0.1	0.2	-1.9	-0.2	0.7	-0.0			
				Earthquake Y Mode 5	-0.1	0.7	1.0	0.6	0.9	-0.1	-0.3	-1.1	-1.6	0.9	0.6	-0.1			
				Earthquake Y Mode 6	-1.5	-1.1	-22.9	-0.8	-21.4	0.2	0.4	1.6	38.5	-1.3	-13.5	0.3			
				Earthquake Y Mode 7	-0.3	0.1	-1.4	0.0	-1.0	0.0	-0.3	-0.1	1.4	0.1	-0.6	0.0			
				Earthquake Y Mode 8	1.4	0.5	10.3	0.4	7.4	-0.0	0.7	-0.7	-11.0	0.6	5.0	-0.1			
				Earthquake Y Mode 9	-0.5	0.3	-0.0	0.3	0.0	-0.0	-0.5	-0.5	-0.1	0.4	0.0	-0.0			
				Floor 4	30.0	9.00/12.00	Self weight	78.1	-1.6	-2.1	-1.2	-2.2	0.0	58.3	2.4	4.7	-2.1	-2.0	0.3
							Dead load	25.8	-1.2	0.0	-0.9	0.0	0.1	24.7	1.9	0.4	-1.8	-0.3	0.4
							Live load	13.0	-0.9	0.5	-0.7	0.7	0.0	12.7	1.4	-1.4	-1.2	0.3	0.1
							Wind +X ecc.+	-0.4	1.5	1.5	1.2	1.2	-0.1	-0.7	-2.3	-2.0	2.1	0.8	-0.5
	Wind +X ecc.-	0.2	1.5				0.7	1.1	0.2	-0.1	0.0	-2.3	0.1	2.1	0.2	-0.4			
	Wind -X ecc.+	0.4	-1.5				-1.5	-1.2	-1.2	0.1	0.7	2.3	2.0	-2.1	-0.8	0.5			
	Wind -X ecc.-	-0.2	-1.5				-0.7	-1.1	-0.2	0.1	-0.0	2.3	-0.1	-2.1	-0.2	0.4			
	Wind +Y ecc.+	-3.9	0.4				7.5	0.3	8.4	-0.0	-5.2	-0.6	-17.3	0.6	5.0	-0.2			
	Wind +Y ecc.-	-6.8	0.5				11.4	0.4	13.0	-0.2	-8.8	-0.7	-26.9	0.7	7.7	-0.5			
	Wind -Y ecc.+	3.9	-0.4				-7.5	-0.3	-8.4	0.0	5.2	0.6	17.3	-0.6	-5.0	0.2			
	Wind -Y ecc.-	6.8	-0.5				-11.4	-0.4	-13.0	0.2	8.8	0.7	26.9	-0.7	-7.7	0.5			
	Earthquake X Mode 1	5.7	5.0				-10.7	3.9	-12.6	0.4	7.0	-7.8	26.6	7.1	-7.2	-0.3			
	Earthquake X Mode 2	10.9	-19.5				-16.0	-15.0	-11.2	2.3	14.7	30.1	17.8	-27.9	-7.7	6.5			
	Earthquake X Mode 3	-5.8	1.1				14.9	0.9	15.0	-0.3	-8.2	-1.7	-29.5	1.6	9.0	-0.7			
	Earthquake X Mode 4	4.3	-0.7				7.7	-0.5	4.7	-0.1	3.8	0.9	-6.1	-0.9	2.9	-0.0			
	Earthquake X Mode 5	-8.6	2.9				4.2	2.2	2.9	-0.3	-9.3	-4.3	-4.5	4.2	1.9	-1.1			
Earthquake X Mode 6	-0.7	-0.1	-3.5				-0.1	-2.2	0.0	-0.4	0.2	3.0	-0.2	-1.4	0.1				
Earthquake X Mode 7	-1.7	-0.0	-1.3				-0.0	0.4	-0.0	-1.8	0.0	-2.3	-0.0	0.3	0.0				
Earthquake X Mode 8	0.7	-0.0	1.2				-0.0	-0.3	-0.0	0.8	0.0	1.9	-0.0	-0.2	-0.0				
Earthquake X Mode 9	-2.2	-0.1	-0.5				-0.1	-0.1	-0.0	-2.3	0.2	-0.2	-0.1	-0.1	-0.1				
Earthquake Y Mode 1	2.6	2.3	-4.9				1.8	-5.7	0.2	3.2	-3.5	12.1	3.2	-3.3	-0.1				
Earthquake Y Mode 2	3.4	-6.0	-4.9				-4.6	-3.5	0.7	4.5	9.3	5.5	-8.6	-2.4	2.0				
Earthquake Y Mode 3	-35.5	7.0	91.9				5.3	92.4	-1.8	-50.2	-10.5	-181.4	10.1	55.3	-4.3				
Earthquake Y Mode 4	0.8	-0.1	1.5				-0.1	0.9	-0.0	0.7	0.2	-1.2	-0.2	0.6	-0.0				
Earthquake Y Mode 5	-1.6	0.5	0.8				0.4	0.5	-0.1	-1.7	-0.8	-0.8	0.8	0.3	-0.2				
Earthquake Y Mode 6	-6.0	-0.8	-28.8				-0.6	-18.2	0.3	-3.5	1.3	25.0	-1.3	-11.4	0.7				
Earthquake Y Mode 7	-0.5	-0.0	-0.4				-0.0	0.1	-0.0	-0.5	0.0	-0.7	-0.0	0.1	0.0				
Earthquake Y Mode 8	1.8	-0.1	3.0				-0.0	-0.7	-0.0	2.1	0.1	4.8	-0.0	-0.5	-0.1				
Earthquake Y Mode 9	-0.8	-0.0	-0.2				-0.0	-0.0	-0.0	-0.8	0.1	-0.1	-0.0	-0.0	-0.0				
Floor 3	30.0	6.00/9.00	Self weight				113.6	-1.2	-0.6	-1.0	0.3	0.0	93.4	2.0	-0.5	-1.7	-0.2	0.3	
			Dead load				44.5	-1.0	-0.6	-0.8	-0.7	0.1	43.5	1.7	1.9	-1.5	-0.7	0.3	
			Live load				19.3	-0.7	-0.1	-0.6	0.3	0.0	19.1	1.1	-0.7	-0.9	0.0	0.1	
			Wind +X ecc.+	-4.5	2.0	1.6	1.5	1.3	-0.2	-4.8	-3.1	-2.3	2.8	0.9	-0.6				
			Wind +X ecc.-	-4.1	2.0	0.0	1.5	-0.3	-0.1	-4.2	-3.1	0.8	2.8	-0.1	-0.5				
			Wind -X ecc.+	4.5	-2.0	-1.6	-1.5	-1.3	0.2	4.8	3.1	2.3	-2.8	-0.9	0.6				
			Wind -X ecc.-	4.1	-2.0	-0.0	-1.5	0.3	0.1	4.2	3.1	-0.8	-2.8	0.1	0.5				
			Wind +Y ecc.+	-2.0	0.5	13.1	0.4	12.6	-0.0	-4.0	-0.8	-23.9	0.8	7.5	-0.3				
			Wind +Y ecc.-	-3.7	0.6	20.5	0.4	19.9	-0.3	-7.0	-0.9	-38.2	0.9	11.9	-0.7				
			Wind -Y ecc.+	2.0	-0.5	-13.1	-0.4	-12.6	0.0	4.0	0.8	23.9	-0.8	-7.5	0.3				
			Wind -Y ecc.-	3.7	-0.6	-20.5	-0.4	-19.9	0.3	7.0	0.9	38.2	-0.9	-11.9	0.7				
			Earthquake X Mode 1	-11.5	6.3	-21.3	4.9	-20.0	0.5	-9.0	-9.7	37.3	8.8	-11.6	-0.3				
			Earthquake X Mode 2	63.6	-23.8	-13.8	-18.2	-10.7	2.6	67.3	36.5	18.9	-33.8	-7.8	7.6				
			Earthquake X Mode 3	-4.0	1.3	23.1	1.0	20.5	-0.4	-7.3	-2.1	-37.4	2.0	12.4	-0.9				
			Earthquake X Mode 4	5.9	-0.2	4.8	-0.1	1.2	-0.0	6.0	0.2	1.1	-0.2	0.8	0.0				
			Earthquake X Mode 5	-12.1	0.7	1.9	0.5	0.9	-0.1	-12.3	-0.9	-1.1	1.0	0.6	-0.5				
			Earthquake X Mode 6	-1.0	-0.0	-2.1	-0.0	-0.6	0.0	-1.0	0.1	-0.3	-0.1	-0.4	0.0				
			Earthquake X Mode 7	-0.1	-0.1	3.9	-0.1	3.1	-0.0	-0.5	0.2	-5.0	-0.2	2.0	-0.0				
			Earthquake X Mode 8	0.0	-0.2	-3.6	-0.1	-2.8	0.0	0.5	0.3	4.7	-0.2	-1.9	0.1				
			Earthquake X Mode 9	-0.1	-0.8	0.4	-0.6	0.3	0.1	-0.2	1.2	-0.6	-1.1	0.2	0.2				
			Earthquake Y Mode 1	-5.2	2.9	-9.7	2.2	-9.1	0.2	-4.1	-4.4	16.9	4.0	-5.3	-0.1				
			Earthquake Y Mode 2	19.6	-7.4	-4.3	-5.6	-3.3	0.8	20.8	11.3	5.9	-10.4	-2.4	2.3				
Earthquake Y Mode 3	-24.9	8.3	141.9	6.3	126.0	-2.3	-45.1	-12.7	-229.9	12.2	76.0	-5.5							
Earthquake Y Mode 4	1.1	-0.0	0.9	-0.0	0.2	-0.0	1.2	0.0	0.2	-0.0	0.2	0.0							
Earthquake Y Mode 5	-2.2	0.1	0.3	0.1	0.2	-0.0	-2.2	-0.2	-0.2	0.2	0.1	-0.1							
Earthquake Y Mode 6	-7.9	-0.2	-17.6	-0.2	-5.0	0.1	-7.9	0.4	-2.1	-0.4	-3.3	0.4							
Earthquake Y Mode 7	-0.0	-0.0	1.2	-0.0	0.9	-0.0	-0.2	0.1	-1.5	-0.1	0.6	-0.0							
Earthquake Y Mode 8	0.1	-0.4	-8.9	-0.3	-7.1	0.1	1.1	0.6	11.6	-0.6	-4.7	0.1							
Earthquake Y Mode 9	-0.1	-0.3	0.1	-0.2	0.1	0.0	-0.1	0.4	-0.2	-0.4	0.1	0.0							



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	30.0	3.00/6.00	Self weight	148.8	-0.9	2.3	-0.7	2.0	0.0	128.3	1.5	-2.3	-1.2	1.0	0.1
				Dead load	62.4	-0.8	-0.2	-0.6	-0.5	0.1	61.4	1.3	2.0	-1.2	-0.5	0.3
				Live load	25.2	-0.6	1.8	-0.5	1.5	-0.0	24.8	0.9	-2.5	-0.7	0.9	0.1
				Wind +X ecc.+	-10.0	2.3	1.4	1.7	1.2	-0.2	-10.3	-3.4	-2.2	3.2	0.8	-0.7
				Wind +X ecc.-	-10.4	2.3	-1.2	1.7	-1.0	-0.1	-10.4	-3.4	1.5	3.2	-0.4	-0.6
				Wind -X ecc.+	10.0	-2.3	-1.4	-1.7	-1.2	0.2	10.3	3.4	2.2	-3.2	-0.8	0.7
				Wind -X ecc.-	10.4	-2.3	1.2	-1.7	1.0	0.1	10.4	3.4	-1.5	-3.2	0.4	0.6
				Wind +Y ecc.+	3.3	0.6	20.2	0.4	16.3	-0.1	0.7	-0.9	-27.8	0.9	9.9	-0.4
				Wind +Y ecc.-	5.0	0.6	32.1	0.5	26.2	-0.4	0.9	-1.0	-44.9	1.0	15.9	-0.8
				Wind -Y ecc.+	-3.3	-0.6	-20.2	-0.4	-16.3	0.1	-0.7	0.9	27.8	-0.9	-9.9	0.4
				Wind -Y ecc.-	-5.0	-0.6	-32.1	-0.5	-26.2	0.4	-0.9	1.0	44.9	-1.0	-15.9	0.8
				Earthquake X Mode 1	-38.4	6.7	-32.9	5.0	-25.3	0.6	-35.2	-9.8	41.1	9.1	-15.0	-0.3
				Earthquake X Mode 2	127.6	-24.6	-8.2	-18.5	-7.7	2.6	130.8	36.6	16.8	-34.4	-6.1	7.9
				Earthquake X Mode 3	1.7	1.3	30.9	1.0	23.6	-0.4	-2.0	-2.1	-38.6	2.0	14.4	-1.0
				Earthquake X Mode 4	3.3	0.4	-2.2	0.3	-3.7	0.1	4.1	-0.7	8.4	0.6	-2.2	0.0
				Earthquake X Mode 5	-8.9	-1.9	-1.3	-1.5	-1.5	0.2	-8.7	2.9	2.9	-2.5	-1.1	0.3
				Earthquake X Mode 6	-0.4	0.1	1.0	0.0	1.6	-0.0	-0.7	-0.1	-3.6	0.1	1.0	-0.0
				Earthquake X Mode 7	1.1	-0.0	2.3	-0.0	0.5	-0.0	1.1	-0.0	0.6	-0.0	0.3	-0.0
				Earthquake X Mode 8	-0.5	-0.0	-2.0	-0.0	-0.5	0.0	-0.5	0.0	-0.5	-0.1	-0.3	0.0
				Earthquake X Mode 9	1.4	-0.1	0.5	-0.0	0.1	0.0	1.4	0.1	0.1	-0.2	0.1	0.1
				Earthquake Y Mode 1	-17.4	3.1	-14.9	2.3	-11.5	0.3	-16.0	-4.5	18.7	4.1	-6.8	-0.1
				Earthquake Y Mode 2	39.4	-7.6	-2.5	-5.7	-2.4	0.8	40.4	11.3	5.2	-10.6	-1.9	2.4
				Earthquake Y Mode 3	10.4	8.1	190.0	6.2	145.0	-2.5	-12.1	-12.7	-237.8	12.4	88.5	-6.2
				Earthquake Y Mode 4	0.6	0.1	-0.4	0.1	-0.7	0.0	0.8	-0.1	1.6	0.1	-0.4	0.0
				Earthquake Y Mode 5	-1.6	-0.3	-0.2	-0.3	-0.3	0.0	-1.6	0.5	0.5	-0.5	-0.2	0.1
				Earthquake Y Mode 6	-2.9	0.5	8.2	0.3	13.2	-0.1	-5.5	-0.6	-29.5	0.6	8.2	-0.2
				Earthquake Y Mode 7	0.3	-0.0	0.7	-0.0	0.2	-0.0	0.3	-0.0	0.2	-0.0	0.1	-0.0
				Earthquake Y Mode 8	-1.3	-0.0	-5.1	-0.0	-1.2	0.0	-1.3	0.1	-1.3	-0.1	-0.8	0.1
				Earthquake Y Mode 9	0.5	-0.0	0.2	-0.0	0.1	0.0	0.5	0.0	0.0	-0.1	0.0	0.0
	Floor 1	30.0	0.00/3.00	Self weight	184.6	-0.3	6.4	-0.3	3.3	-0.0	163.9	0.8	-1.3	-0.5	2.1	0.0
				Dead load	80.0	-0.3	1.1	-0.3	-0.2	0.0	79.0	0.8	2.5	-0.6	-0.2	0.2
				Live load	31.4	-0.2	4.0	-0.2	2.1	-0.0	30.9	0.5	-1.8	-0.3	1.4	0.0
				Wind +X ecc.+	-15.5	1.7	0.7	1.2	0.7	-0.1	-15.7	-2.3	-1.5	2.3	0.5	-0.5
				Wind +X ecc.-	-17.2	1.7	-4.8	1.2	-2.3	-0.1	-17.1	-2.3	1.7	2.3	-1.5	-0.4
				Wind -X ecc.+	15.5	-1.7	-0.7	-1.2	-0.7	0.1	15.7	2.3	1.5	-2.3	-0.5	0.5
				Wind -X ecc.-	17.2	-1.7	4.8	-1.2	2.3	0.1	17.1	2.3	-1.7	-2.3	1.5	0.4
				Wind +Y ecc.+	11.7	0.3	40.0	0.2	21.4	-0.1	9.5	-0.6	-22.5	0.6	14.4	-0.4
				Wind +Y ecc.-	19.4	0.2	65.9	0.2	35.4	-0.3	15.8	-0.7	-37.4	0.7	23.9	-0.7
				Wind -Y ecc.+	-11.7	-0.3	-40.0	-0.2	-21.4	0.1	-9.5	0.6	22.5	-0.6	-14.4	0.4
				Wind -Y ecc.-	-19.4	-0.2	-65.9	-0.2	-35.4	0.3	-15.8	0.7	37.4	-0.7	-23.9	0.7
				Earthquake X Mode 1	-69.2	4.8	-66.2	3.3	-34.0	0.4	-66.4	-6.1	32.3	6.0	-22.7	-0.3
				Earthquake X Mode 2	185.1	-16.2	2.1	-11.6	-2.3	1.6	187.2	22.6	11.9	-22.3	-2.2	5.8
Earthquake X Mode 3				11.1	0.7	51.9	0.6	27.1	-0.3	8.3	-1.3	-27.5	1.3	18.2	-0.8	
Earthquake X Mode 4				-2.0	0.6	-12.1	0.4	-7.2	0.1	-1.2	-0.7	8.6	0.7	-4.8	0.0	
Earthquake X Mode 5				-2.5	-2.2	-4.3	-1.6	-2.7	0.2	-2.1	3.2	3.7	-3.0	-2.0	0.6	
Earthquake X Mode 6				0.9	0.1	5.2	0.0	3.1	-0.0	0.6	-0.1	-3.7	0.1	2.1	-0.1	
Earthquake X Mode 7				0.0	0.1	-4.8	0.1	-3.3	0.0	0.4	-0.2	4.6	0.2	-2.3	0.0	
Earthquake X Mode 8				-0.0	0.1	4.5	0.1	3.1	-0.0	-0.4	-0.2	-4.3	0.2	2.2	-0.0	
Earthquake X Mode 9				-0.0	0.6	-0.7	0.5	-0.5	-0.0	0.0	-0.9	0.6	0.8	-0.3	-0.1	
Earthquake Y Mode 1				-31.4	2.2	-30.0	1.5	-15.4	0.2	-30.1	-2.8	14.6	2.7	-10.3	-0.1	
Earthquake Y Mode 2				57.2	-5.0	0.6	-3.6	-0.7	0.5	57.8	7.0	3.7	-6.9	-0.7	1.8	
Earthquake Y Mode 3				68.2	4.2	319.5	3.5	166.7	-1.8	51.2	-7.9	-169.2	7.9	112.2	-4.9	
Earthquake Y Mode 4				-0.4	0.1	-2.3	0.1	-1.4	0.0	-0.2	-0.1	1.7	0.1	-0.9	0.0	
Earthquake Y Mode 5				-0.4	-0.4	-0.8	-0.3	-0.5	0.0	-0.4	0.6	0.7	-0.5	-0.4	0.1	
Earthquake Y Mode 6				7.6	0.4	42.4	0.4	25.1	-0.2	4.6	-0.8	-30.6	0.7	17.0	-0.4	
Earthquake Y Mode 7				0.0	0.0	-1.4	0.0	-1.0	0.0	0.1	-0.1	1.4	0.0	-0.7	0.0	
Earthquake Y Mode 8				-0.0	0.3	11.2	0.2	7.7	-0.0	-0.9	-0.4	-10.8	0.4	5.4	-0.1	
Earthquake Y Mode 9				-0.0	0.2	-0.3	0.2	-0.2	-0.0	0.0	-0.3	0.2	0.3	-0.1	-0.0	
W9	techo	30.0	12.00/15.00	Self weight	41.2	-1.5	5.9	-1.1	4.2	0.0	19.9	1.9	-5.9	-1.7	2.9	0.2
				Dead load	6.5	-1.7	1.5	-1.4	1.7	0.1	5.9	2.6	-3.4	-2.0	1.0	0.1
				Live load	7.4	-0.8	-0.8	-0.5	-0.5	0.0	7.0	0.9	0.7	-0.8	-0.3	0.1
				Wind +X ecc.+	2.2	1.2	-0.8	1.0	-0.7	-0.0	2.0	-2.1	1.3	1.6	-0.4	-0.1
				Wind +X ecc.-	1.7	1.2	-1.2	1.0	-1.3	-0.0	1.6	-2.0	2.7	1.6	-0.7	-0.1
				Wind -X ecc.+	-2.2	-1.2	0.8	-1.0	0.7	0.0	-2.0	2.1	-1.3	-1.6	0.4	0.1
				Wind -X ecc.-	-1.7	-1.2	1.2	-1.0	1.3	0.0	-1.6	2.0	-2.7	-1.6	0.7	0.1
				Wind +Y ecc.+	3.1	-0.2	3.3	-0.2	5.2	0.1	2.5	0.4	-11.3	-0.3	2.6	0.1
				Wind +Y ecc.-	5.3	-0.1	5.2	-0.1	8.1	-0.1	4.2	0.2	-17.6	-0.2	4.0	-0.1
				Wind -Y ecc.+	-3.1	0.2	-3.3	0.2	-5.2	-0.1	-2.5	-0.4	11.3	0.3	-2.6	-0.1
				Wind -Y ecc.-	-5.3	0.1	-5.2	0.1	-8.1	0.1	-4.2	-0.2	17.6	0.2	-4.0	0.1
				Earthquake X Mode 1	-0.0	3.6	-11.5	3.0	-14.2	0.5	0.9	-6.0	29.0	4.7	-7.5	0.4
				Earthquake X Mode 2	-23.8	-18.4	9.9	-15.2	10.4	1.1	-22.0	30.2	-20.4	-23.8	6.2	2.2
				Earthquake X Mode 3	5.4	0.5	7.6	0.4	10.1	-0.1	4.2	-0.8	-21.2	0.6	5.3	-0.1
				Earthquake X Mode 4	-0.5	-0.7	6.9	-0.6	6.4	-0.1	-0.8	1.1	-11.5	-0.9	3.8	-0.1
				Earthquake X Mode 5	-1.8	4.2	1.5	3.3	1.2	-0.3	-1.9	-6.5	-1.8	5.2	0.8	-0.5
				Earthquake X Mode 6	0.3	-0.1	-2.6	-0.0	-2.5	0.0	0.4	0.1	4.5	-0.1	-1.5	0.0
				Earthquake X Mode 7	0.8	0.1	-4.6	0.1	-3.3	0.0	0.9	-0.2	4.8	0.2	-2.2	0.0
				Earthquake X Mode 8	-1.1	0.2	4.0	0.1	2.8	-0.0	-1.1	-0.3	-4.2	0.2	1.9	-0.0
				Earthquake X Mode 9	-1.3	1.0	-0.7	0.8	-0.5	-0.1	-1.2	-1.5	0.9	1.3	-0.3	-0.1
				Earthquake Y Mode 1	-0.0	1.6	-5.2	1.4	-6.5	0.2	0.4	-2.7	13.2	2.1	-3.4	0.2
				Earthquake Y Mode 2	-7.3	-5.7	3.1	-4.7	3.2	0.3	-6.8	9.3	-6.3	-7.3	1.9	0.7
Earthquake Y Mode 3	33.4	2.8	46.9	2.4	62.4	-0.7	26.1	-4.6	-130.2	3.4	32.4	-0.9				
Earthquake Y Mode 4	-0.1	-0.1	1.3	-0.1	1.2	-0.0	-0.2	0.2	-2.2	-0.2	0.7	-0.0				
Earthquake Y Mode 5	-0.3	0.8	0.3	0.6	0.2	-0.0	-0.3	-1.2	-0.3	0.9	0.1	-0.1				
Earthquake Y Mode 6	2.4	-0.5	-21.7	-0.4	-20.6	0.1	3.3	0.8	37.0	-0.5	-12.2	0.1				
Earthquake Y Mode 7	0.2	0.0	-1.4	0.0	-1.0	0.0	0.3	-0.1	1.5	0.1	-0.7	0.0				
Earthquake Y Mode 8	-2.7	0.4	10.0	0.3	7.1	-0.0	-2.8	-0.6	-10.4	0.5	4.7	-0.0				
Earthquake Y Mode 9	-0.5	0.4	-0.2	0.3	-0.2	-0.0	-0.5	-0.6	0.3	0.5	-0.1	-0.0				



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 4	30.0	9.00/12.00	Self weight	79.7	-1.7	-2.3	-1.3	-2.5	0.0	59.1	2.5	4.4	-2.0	-1.6	0.2				
				Dead load	25.4	-1.3	3.5	-1.0	2.9	0.0	24.5	2.0	-5.4	-1.7	2.1	0.3				
				Live load	15.0	-0.9	0.0	-0.7	0.2	0.0	14.8	1.4	-0.5	-1.0	0.2	0.1				
				Wind +X ecc.+	-0.5	1.5	-0.6	1.2	-0.5	-0.1	-0.5	-2.3	0.9	2.0	-0.3	-0.3				
				Wind +X ecc.-	-1.1	1.5	-1.4	1.1	-1.5	-0.0	-1.1	-2.2	3.1	1.9	-1.0	-0.3				
				Wind -X ecc.+	0.5	-1.5	0.6	-1.2	0.5	0.1	0.5	2.3	-0.9	-2.0	0.3	0.3				
				Wind -X ecc.-	1.1	-1.5	1.4	-1.1	1.5	0.0	1.1	2.2	-3.1	-1.9	1.0	0.3				
				Wind +Y ecc.+	3.9	-0.3	7.1	-0.2	8.2	0.0	4.1	0.4	-17.7	-0.3	5.4	0.1				
				Wind +Y ecc.-	6.5	-0.1	10.9	-0.1	12.7	-0.2	6.8	0.1	-27.6	-0.1	8.3	-0.2				
				Wind -Y ecc.+	-3.9	0.3	-7.1	0.2	-8.2	-0.0	-4.1	-0.4	17.7	0.3	-5.4	-0.1				
				Wind -Y ecc.-	-6.5	0.1	-10.9	0.1	-12.7	0.2	-6.8	-0.1	27.6	0.1	-8.3	0.2				
				Earthquake X Mode 1	-9.6	4.1	-17.2	3.2	-17.8	0.7	-9.8	-6.2	37.0	5.2	-11.7	0.2				
				Earthquake X Mode 2	14.9	-21.0	11.1	-16.0	10.2	1.4	15.6	31.8	-20.4	-27.1	6.7	4.9				
				Earthquake X Mode 3	4.4	0.6	13.6	0.4	14.1	-0.2	4.6	-0.9	-29.0	0.8	9.3	-0.3				
				Earthquake X Mode 4	-0.8	-0.5	8.3	-0.4	5.2	-0.1	-1.0	0.8	-7.4	-0.7	3.6	-0.0				
				Earthquake X Mode 5	-11.4	3.1	1.7	2.3	0.8	-0.2	-11.6	-4.5	-0.4	3.9	0.5	-0.8				
				Earthquake X Mode 6	1.3	-0.0	-3.4	-0.0	-2.2	0.0	1.3	0.1	3.1	-0.1	-1.5	0.0				
				Earthquake X Mode 7	1.1	0.0	-1.3	-0.0	0.4	0.0	1.5	0.0	-2.3	-0.0	0.2	-0.0				
				Earthquake X Mode 8	-1.6	-0.0	1.2	-0.0	-0.3	-0.0	-1.9	0.0	2.0	-0.0	-0.2	-0.0				
				Earthquake X Mode 9	-2.1	-0.1	-0.5	-0.1	-0.2	0.0	-2.1	0.3	0.1	-0.2	-0.2	-0.1				
				Earthquake Y Mode 1	-4.4	1.9	-7.8	1.4	-8.1	0.3	-4.5	-2.8	16.8	2.4	-5.3	0.1				
				Earthquake Y Mode 2	4.6	-6.5	3.4	-5.0	3.2	0.4	4.8	9.8	-6.3	-8.4	2.1	1.5				
				Earthquake Y Mode 3	27.1	3.4	83.6	2.6	86.7	-1.3	28.4	-5.4	-178.8	4.8	57.2	-2.0				
				Earthquake Y Mode 4	-0.1	-0.1	1.6	-0.1	1.0	-0.0	-0.2	0.1	-1.4	-0.1	0.7	-0.0				
				Earthquake Y Mode 5	-2.1	0.6	0.3	0.4	0.1	-0.0	-2.1	-0.8	-0.1	0.7	0.1	-0.2				
				Earthquake Y Mode 6	10.3	-0.4	-28.2	-0.3	-17.8	0.2	11.0	0.6	25.4	-0.5	-12.4	0.3				
				Earthquake Y Mode 7	0.3	0.0	-0.4	-0.0	0.1	0.0	0.4	0.0	-0.7	-0.0	0.1	-0.0				
				Earthquake Y Mode 8	-4.0	-0.1	3.1	-0.1	-0.7	-0.0	-4.9	0.1	5.0	-0.1	-0.4	-0.1				
				Earthquake Y Mode 9	-0.8	-0.0	-0.2	-0.0	-0.1	0.0	-0.8	0.1	0.0	-0.1	-0.1	-0.0				
					Floor 3	30.0	6.00/9.00	Self weight	117.5	-1.3	-0.2	-1.1	0.6	0.0	98.0	2.0	-3.0	-1.6	0.7	0.2
								Dead load	44.0	-1.1	2.6	-0.9	1.9	0.0	43.0	1.8	-3.5	-1.5	1.4	0.2
								Live load	21.6	-0.8	0.0	-0.6	0.3	0.0	21.5	1.1	-1.2	-0.8	0.3	0.1
								Wind +X ecc.+	-4.8	2.0	-0.5	1.5	-0.4	-0.1	-4.8	-3.1	0.9	2.6	-0.3	-0.4
Wind +X ecc.-	-5.0	2.0	-2.1					1.5	-2.0	-0.0	-5.0	-3.0	4.1	2.5	-1.3	-0.3				
Wind -X ecc.+	4.8	-2.0	0.5					-1.5	0.4	0.1	4.8	3.1	-0.9	-2.6	0.3	0.4				
Wind -X ecc.-	5.0	-2.0	2.1					-1.5	2.0	0.0	5.0	3.0	-4.1	-2.5	1.3	0.3				
Wind +Y ecc.+	1.6	-0.3	12.7					-0.2	12.3	0.0	1.9	0.4	-24.6	-0.4	8.2	0.1				
Wind +Y ecc.-	2.5	-0.1	19.9					-0.0	19.6	-0.2	3.0	0.1	-39.3	-0.0	13.0	-0.3				
Wind -Y ecc.+	-1.6	0.3	-12.7					0.2	-12.3	-0.0	-1.9	-0.4	24.6	0.4	-8.2	-0.1				
Wind -Y ecc.-	-2.5	0.1	-19.9					0.0	-19.6	0.2	-3.0	-0.1	39.3	0.0	-13.0	0.3				
Earthquake X Mode 1	-16.9	5.1	-27.5					3.9	-25.2	0.9	-17.2	-7.7	49.0	6.5	-16.9	0.3				
Earthquake X Mode 2	68.9	-25.6	11.9					-19.6	10.5	1.7	69.6	38.8	-21.3	-33.0	7.0	5.7				
Earthquake X Mode 3	-1.6	0.7	21.7					0.6	19.5	-0.3	-1.5	-1.1	-37.2	1.0	13.1	-0.4				
Earthquake X Mode 4	-0.7	-0.2	5.1					-0.1	1.5	-0.0	-1.4	0.2	0.5	-0.2	1.1	0.0				
Earthquake X Mode 5	-15.3	0.8	0.7					0.5	-0.2	-0.1	-15.6	-0.8	1.6	0.8	-0.1	-0.4				
Earthquake X Mode 6	1.7	-0.0	-2.1					-0.0	-0.6	0.0	1.9	0.0	-0.3	-0.0	-0.5	0.0				
Earthquake X Mode 7	0.1	-0.1	3.9					-0.1	3.1	-0.0	0.4	0.1	-5.3	-0.1	2.2	-0.0				
Earthquake X Mode 8	-0.2	-0.2	-3.5					-0.1	-2.8	0.0	-0.4	0.2	4.8	-0.2	-2.0	0.0				
Earthquake X Mode 9	-0.1	-0.9	0.5					-0.7	0.4	0.0	-0.0	1.3	-0.8	-1.1	0.3	0.1				
Earthquake Y Mode 1	-7.6	2.3	-12.5					1.8	-11.5	0.4	-7.8	-3.5	22.2	2.9	-7.7	0.1				
Earthquake Y Mode 2	21.3	-7.9	3.7					-6.0	3.3	0.5	21.5	12.0	-6.6	-10.2	2.2	1.8				
Earthquake Y Mode 3	-10.1	4.5	133.5					3.4	120.0	-1.7	-9.0	-6.9	-228.8	6.1	80.3	-2.6				
Earthquake Y Mode 4	-0.1	-0.0	1.0					-0.0	0.3	-0.0	-0.3	0.0	0.1	-0.0	0.2	0.0				
Earthquake Y Mode 5	-2.8	0.1	0.1					0.1	-0.0	-0.0	-2.8	-0.2	0.3	0.2	-0.0	-0.1				
Earthquake Y Mode 6	13.7	-0.1	-17.5					-0.0	-4.8	0.1	15.9	0.1	-2.5	-0.1	-3.8	0.2				
Earthquake Y Mode 7	0.0	-0.0	1.2					-0.0	0.9	-0.0	0.1	0.0	-1.6	-0.0	0.7	-0.0				
Earthquake Y Mode 8	-0.4	-0.4	-8.8					-0.3	-7.0	0.0	-1.1	0.6	12.0	-0.5	-5.0	0.1				
Earthquake Y Mode 9	-0.0	-0.3	0.2					-0.2	0.2	0.0	-0.0	0.5	-0.3	-0.4	0.1	0.0				
	Floor 2	30.0	3.00/6.00					Self weight	152.4	-1.0	2.9	-0.8	2.6	-0.0	133.1	1.5	-6.3	-1.1	2.1	0.1
								Dead load	61.9	-0.9	2.8	-0.7	2.0	0.0	61.1	1.4	-3.8	-1.2	1.5	0.2
								Live load	26.8	-0.6	1.9	-0.5	1.7	-0.0	26.9	0.9	-3.4	-0.6	1.3	0.1
								Wind +X ecc.+	-10.6	2.3	-0.2	1.7	-0.2	-0.1	-10.6	-3.4	0.7	2.9	-0.2	-0.5
				Wind +X ecc.-	-9.8	2.3	-2.8	1.7	-2.4	-0.0	-9.9	-3.3	4.5	2.8	-1.6	-0.4				
				Wind -X ecc.+	10.6	-2.3	0.2	-1.7	0.2	0.1	10.6	3.4	-0.7	-2.9	0.2	0.5				
				Wind -X ecc.-	9.8	-2.3	2.8	-1.7	2.4	0.0	9.9	3.3	-4.5	-2.8	1.6	0.4				
				Wind +Y ecc.+	-4.2	-0.2	19.7	-0.2	16.0	0.0	-4.0	0.4	-28.6	-0.3	10.9	0.1				
				Wind +Y ecc.-	-7.7	0.1	31.5	0.0	25.9	-0.3	-7.5	-0.1	-46.4	0.1	17.5	-0.4				
				Wind -Y ecc.+	4.2	0.2	-19.7	0.2	-16.0	-0.0	4.0	-0.4	28.6	0.3	-10.9	-0.1				
				Wind -Y ecc.-	7.7	-0.1	-31.5	-0.0	-25.9	0.3	7.5	0.1	-46.4	-0.1	-17.5	0.4				
				Earthquake X Mode 1	-20.3	5.3	-37.4	4.0	-29.5	0.9	-20.3	-7.7	51.9	6.6	-20.0	0.3				
				Earthquake X Mode 2	134.4	-26.7	10.4	-20.0	8.6	1.6	135.0	38.9	-18.0	-33.5	5.8	6.1				
				Earthquake X Mode 3	-12.7	0.9	29.8	0.6	22.8	-0.3	-12.9	-1.2	-38.9	1.1	15.5	-0.5				
				Earthquake X Mode 4	0.4	0.3	-2.1	0.2	-3.7	0.1	-0.3	-0.5	8.6	0.4	-2.4	0.1				
				Earthquake X Mode 5	-10.5	-2.1	-1.3	-1.6	-1.6	0.1	-10.9	3.2	3.5	-2.6	-1.1	0.2				
				Earthquake X Mode 6	0.9	0.0	1.0	0.0	1.6	-0.0	1.2	-0.1	-3.7	0.1	1.1	-0.0				
				Earthquake X Mode 7	-0.7	-0.0	2.3	-0.0	0.5	-0.0	-1.0	0.0	0.6	-0.0	0.4	-0.0				
				Earthquake X Mode 8	0.9	-0.0	-2.1	-0.0	-0.5	0.0	1.2	0.0	-0.5	-0.0	-0.4	0.0				
				Earthquake X Mode 9	1.2	-0.1	0.5	-0.0	0.2	0.0	1.2	0.1	-0.0	-0.1	0.1	0.1				
				Earthquake Y Mode 1	-9.2	2.4	-17.0	1.8	-13.4	0.4	-9.2	-3.5	23.6	3.0	-9.1	0.1				
				Earthquake Y Mode 2	41.5	-8.3	3.2	-6.2	2.7	0.5	41.7	12.0	-5.5	-10.3	1.8	1.9				
				Earthquake Y Mode 3	-78.0	5.3	183.3	3.9	140.2	-1.9	-79.3	-7.6	-239.2	6.8	95.4	-3.0				
				Earthquake Y Mode 4	0.1	0.1	-0.4	0.0	-0.7	0.0	-0.1	-0.1	1.7	0.1	-0.5	0.0				
				Earthquake Y Mode 5	-1.9	-0.4	-0.2	-0.3	-0.3	0.0	-2.0	0.6	0.6	-0.5	-0.2	0.0				
				Earthquake Y Mode 6	7.3	0.4	8.0	0.3	13.1	-0.1	9.8	-0.6	-30.7	0.5	8.7	-0.1				
				Earthquake Y Mode 7	-0.2	-0.0	0.7	-0.0	0.2	-0.0	-0.3	0.0	0.2	-0.0	0.1	-0.0				
				Earthquake Y Mode 8	2.4	-0.0	-5.2	-0.0	-1.2	0.0	2.9	0.0	-1.3	-0.0	-1.0	0.1				
				Earthquake Y Mode 9	0.5	-0.0	0.2	-0.0	0.1	0.0	0.4	0.0	-0.0	-0.0	0.0	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	30.0	0.00/3.00	Self weight	184.9	-0.3	6.8	-0.4	3.7	-0.0	165.7	0.8	-6.2	-0.4	3.0	0.0
				Dead load	79.2	-0.3	2.6	-0.3	1.4	0.0	78.4	0.8	-2.5	-0.6	1.2	0.1
				Live load	30.9	-0.2	4.1	-0.2	2.2	-0.0	30.8	0.5	-2.8	-0.2	1.7	0.0
				Wind +X ecc.+	-16.4	1.7	0.1	1.2	-0.0	-0.1	-16.4	-2.2	0.4	2.0	-0.0	-0.4
				Wind +X ecc.-	-14.1	1.6	-5.5	1.1	-3.1	-0.0	-14.1	-2.2	3.8	1.9	-2.2	-0.3
				Wind -X ecc.+	16.4	-1.7	-0.1	-1.2	0.0	0.1	16.4	2.2	-0.4	-2.0	0.0	0.4
				Wind -X ecc.-	14.1	-1.6	5.5	-1.1	3.1	0.0	14.1	2.2	-3.8	-1.9	2.2	0.3
				Wind +Y ecc.+	-13.3	-0.1	40.1	-0.1	21.4	-0.0	-13.9	0.2	-23.6	-0.1	15.7	-0.0
				Wind +Y ecc.-	-23.8	0.1	66.2	0.1	35.5	-0.3	-24.6	-0.2	-39.3	0.2	26.1	-0.3
				Wind -Y ecc.+	13.3	0.1	-40.1	0.1	-21.4	0.0	13.9	-0.2	23.6	0.1	-15.7	0.0
				Wind -Y ecc.-	23.8	-0.1	-66.2	-0.1	-35.5	0.3	24.6	0.2	39.3	-0.2	-26.1	0.3
				Earthquake X Mode 1	-16.7	3.4	-68.5	2.4	-36.2	0.6	-15.7	-4.5	40.0	4.0	-26.6	0.1
				Earthquake X Mode 2	193.1	-17.3	9.7	-12.3	5.5	0.9	193.6	23.3	-9.9	-20.7	4.0	4.5
				Earthquake X Mode 3	-27.0	0.6	51.9	0.4	26.9	-0.2	-28.2	-0.8	-28.2	0.8	19.8	-0.4
				Earthquake X Mode 4	2.7	0.4	-12.3	0.3	-7.3	0.1	2.5	-0.5	9.3	0.4	-5.3	0.0
				Earthquake X Mode 5	-1.0	-2.4	-4.1	-1.7	-2.5	0.1	-1.2	3.3	3.3	-2.9	-1.8	0.5
				Earthquake X Mode 6	-0.8	0.0	5.2	0.0	3.1	-0.0	-0.7	-0.1	-3.9	0.1	2.2	-0.0
				Earthquake X Mode 7	-0.0	0.1	-4.9	0.1	-3.3	0.0	-0.3	-0.1	4.9	0.1	-2.4	0.0
				Earthquake X Mode 8	-0.1	0.1	4.5	0.1	3.1	-0.0	0.2	-0.2	-4.5	0.1	2.3	-0.0
				Earthquake X Mode 9	-0.1	0.7	-0.8	0.5	-0.5	-0.0	-0.1	-1.0	0.8	0.8	-0.4	-0.1
				Earthquake Y Mode 1	-7.6	1.5	-31.1	1.1	-16.5	0.3	-7.1	-2.0	18.1	1.8	-12.1	0.0
				Earthquake Y Mode 2	59.6	-5.3	3.0	-3.8	1.7	0.3	59.8	7.2	-3.1	-6.4	1.2	1.4
				Earthquake Y Mode 3	-166.4	3.8	319.1	2.7	165.6	-1.4	-173.4	-5.2	-173.4	4.7	121.7	-2.4
				Earthquake Y Mode 4	0.5	0.1	-2.4	0.1	-1.4	0.0	0.5	-0.1	1.8	0.1	-1.0	0.0
				Earthquake Y Mode 5	-0.2	-0.4	-0.8	-0.3	-0.5	0.0	-0.2	0.6	0.6	-0.5	-0.3	0.1
				Earthquake Y Mode 6	-6.4	0.4	42.6	0.3	25.2	-0.1	-5.6	-0.6	-32.0	0.5	18.4	-0.2
				Earthquake Y Mode 7	-0.0	0.0	-1.5	0.0	-1.0	0.0	-0.1	-0.0	1.5	0.0	-0.7	0.0
				Earthquake Y Mode 8	-0.2	0.3	11.2	0.2	7.7	-0.0	0.6	-0.4	-11.2	0.4	5.6	-0.0
				Earthquake Y Mode 9	-0.0	0.2	-0.3	0.2	-0.2	-0.0	-0.0	-0.4	0.3	0.3	-0.1	-0.0
W10	techo	30.0	12.00/15.00	Self weight	45.6	-1.5	-5.5	-1.0	-6.7	-0.0	24.5	1.3	14.6	-0.9	-3.0	-0.0
				Dead load	5.7	-1.4	-3.5	-1.2	-1.8	-0.0	6.0	2.1	2.2	-1.3	-0.0	0.1
				Live load	11.6	-0.8	-6.0	-0.5	-6.0	-0.0	10.8	0.6	11.4	-0.5	-3.5	-0.0
				Wind +X ecc.+	0.0	0.3	-1.9	0.4	-1.7	0.0	0.1	-0.7	3.0	0.4	-1.2	-0.0
				Wind +X ecc.-	-0.1	0.3	-1.8	0.4	-1.9	0.1	-0.1	-0.7	3.7	0.4	-1.3	0.0
				Wind -X ecc.+	-0.0	-0.3	1.9	-0.4	1.7	-0.0	-0.1	0.7	-3.0	-0.4	1.2	0.0
				Wind -X ecc.-	0.1	-0.3	1.8	-0.4	1.9	-0.1	0.1	0.7	-3.7	-0.4	1.3	-0.0
				Wind +Y ecc.+	0.8	-0.1	1.2	-0.1	3.0	0.0	0.7	0.2	-7.6	-0.1	1.8	0.1
				Wind +Y ecc.-	1.3	-0.1	1.1	-0.1	4.0	-0.1	1.2	0.1	-10.5	-0.1	2.2	-0.0
				Wind -Y ecc.+	-0.8	0.1	-1.2	0.1	-3.0	0.0	-0.7	-0.2	7.6	0.1	-1.8	-0.1
				Wind -Y ecc.-	-1.3	0.1	-1.1	0.1	-4.0	0.1	-1.2	-0.1	10.5	0.1	-2.2	0.0
				Earthquake X Mode 1	-3.1	0.9	-7.5	0.9	-10.0	0.7	-2.7	-1.9	21.6	1.0	-6.2	0.5
				Earthquake X Mode 2	-3.8	-5.4	25.8	-5.6	24.7	-0.1	-3.8	11.1	-45.5	-6.0	17.4	0.8
				Earthquake X Mode 3	2.6	0.1	2.8	0.1	5.3	-0.1	2.4	-0.2	-12.8	0.1	3.1	-0.0
				Earthquake X Mode 4	2.6	-0.2	6.0	-0.2	5.5	-0.2	2.3	0.4	-9.9	-0.2	3.6	-0.1
				Earthquake X Mode 5	5.2	1.6	-1.6	1.4	-1.8	0.0	4.8	-2.7	3.4	1.6	-1.4	-0.2
				Earthquake X Mode 6	-1.1	-0.0	-2.2	-0.0	-2.0	0.0	-1.0	0.0	3.7	-0.0	-1.3	0.0
				Earthquake X Mode 7	-1.5	0.0	-4.4	0.0	-3.1	0.0	-1.4	-0.1	4.5	0.0	-2.1	0.0
				Earthquake X Mode 8	1.5	0.1	3.8	0.1	2.6	-0.0	1.4	-0.1	-3.7	0.1	1.8	0.0
				Earthquake X Mode 9	1.6	0.6	-1.1	0.5	-1.0	0.0	1.4	-0.7	1.8	0.5	-0.7	-0.0
				Earthquake Y Mode 1	-1.4	0.4	-3.4	0.4	-4.5	0.3	-1.2	-0.8	9.8	0.5	-2.8	0.2
				Earthquake Y Mode 2	-1.2	-1.7	8.0	-1.7	7.6	-0.0	-1.2	3.4	-14.0	-1.8	5.4	0.2
				Earthquake Y Mode 3	16.3	0.7	17.0	0.8	32.8	-0.4	14.8	-1.5	-79.1	0.7	19.3	-0.3
				Earthquake Y Mode 4	0.5	-0.0	1.2	-0.0	1.1	-0.0	0.4	0.1	-1.9	-0.0	0.7	-0.0
				Earthquake Y Mode 5	1.0	0.3	-0.3	0.3	-0.3	0.0	0.9	-0.5	0.6	0.3	-0.3	-0.0
				Earthquake Y Mode 6	-9.3	-0.1	-18.0	-0.1	-16.7	0.1	-8.4	0.2	30.6	-0.1	-11.0	0.0
				Earthquake Y Mode 7	-0.5	0.0	-1.3	0.0	-0.9	0.0	-0.4	-0.0	1.3	0.0	-0.6	0.0
				Earthquake Y Mode 8	3.9	0.2	9.4	0.2	6.4	-0.0	3.5	-0.3	-9.3	0.2	4.5	0.0
				Earthquake Y Mode 9	0.6	0.2	-0.4	0.2	-0.4	0.0	0.5	-0.3	0.7	0.2	-0.3	-0.0
	Floor 4	30.0	9.00/12.00	Self weight	91.7	-1.8	-10.7	-1.4	-9.3	0.0	71.6	2.6	18.6	-1.8	-6.3	0.1
				Dead load	29.7	-1.0	-1.7	-0.7	-1.8	0.0	27.8	1.2	4.4	-0.8	-1.5	0.1
				Live load	20.9	-1.1	-3.5	-0.9	-2.6	0.0	20.6	1.6	5.0	-1.1	-1.6	0.1
				Wind +X ecc.+	-0.9	0.3	-1.8	0.3	-1.4	0.0	-0.9	-0.6	2.4	0.3	-1.0	-0.0
				Wind +X ecc.-	-1.5	0.3	-2.3	0.3	-2.1	0.1	-1.4	-0.6	3.9	0.3	-1.4	0.0
				Wind -X ecc.+	0.9	-0.3	1.8	-0.3	1.4	-0.0	0.9	0.6	-2.4	-0.3	1.0	0.0
				Wind -X ecc.-	1.5	-0.3	2.3	-0.3	2.1	-0.1	1.4	0.6	-3.9	-0.3	1.4	-0.0
				Wind +Y ecc.+	4.4	-0.1	5.5	-0.1	6.9	0.0	3.5	0.1	-14.8	-0.0	4.3	0.1
				Wind +Y ecc.-	7.3	-0.1	7.5	-0.0	10.0	-0.1	5.8	-0.1	-22.0	0.1	6.1	-0.1
				Wind -Y ecc.+	-4.4	0.1	-5.5	0.1	-6.9	-0.0	-3.5	-0.1	14.8	0.0	-4.3	-0.1
				Wind -Y ecc.-	-7.3	0.1	-7.5	0.0	-10.0	0.1	-5.8	0.1	22.0	-0.1	-6.1	0.1
				Earthquake X Mode 1	-15.4	0.8	-14.3	0.7	-15.5	0.9	-13.5	-1.0	31.4	0.5	-9.7	0.9
				Earthquake X Mode 2	8.0	-5.3	28.1	-4.6	23.1	-0.1	8.0	8.3	-40.2	-4.7	16.6	0.7
				Earthquake X Mode 3	9.5	0.1	9.5	0.1	10.9	-0.1	8.0	-0.3	-22.5	0.2	6.7	-0.1
				Earthquake X Mode 4	6.4	-0.2	7.7	-0.1	4.8	-0.1	6.3	0.1	-6.2	-0.0	3.2	-0.1
				Earthquake X Mode 5	5.7	1.3	-0.2	0.7	-0.9	-0.0	5.5	-0.8	2.7	0.5	-0.8	-0.1
				Earthquake X Mode 6	-2.5	-0.0	-3.1	-0.0	-1.9	0.0	-2.5	0.0	2.5	-0.0	-1.3	0.0
				Earthquake X Mode 7	-2.1	-0.0	-1.3	-0.0	0.4	0.0	-2.6	0.0	-2.4	-0.0	0.2	0.0
				Earthquake X Mode 8	2.0	0.0	1.3	-0.0	-0.3	-0.0	2.4	0.0	2.1	-0.0	-0.1	-0.0
				Earthquake X Mode 9	1.2	0.1	-0.2	-0.1	-0.1	0.0	1.1	0.4	0.0	-0.2	-0.1	0.0
				Earthquake Y Mode 1	-7.0	0.4	-6.5	0.3	-7.0	0.4	-6.1	-0.5	14.2	0.2	-4.4	0.4
				Earthquake Y Mode 2	2.5	-1.7	8.7	-1.4	7.1	-0.0	2.5	2.6	-12.4	-1.5	5.1	0.2



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 3	30.0	6.00/9.00	Self weight	134.2	-1.5	-7.3	-1.2	-5.4	0.0	113.8	2.1	11.2	-1.4	-3.5	0.1				
				Dead load	49.0	-0.8	-0.8	-0.7	-1.0	0.0	47.6	1.2	3.1	-0.8	-0.9	0.1				
				Live load	30.3	-1.0	-3.3	-0.8	-2.6	-0.0	30.2	1.3	5.2	-0.9	-1.6	0.1				
				Wind +X ecc.+	-1.2	0.5	-2.0	0.5	-1.6	0.0	-1.3	-0.8	2.8	0.5	-1.2	-0.0				
				Wind +X ecc.-	-2.9	0.5	-3.2	0.4	-2.9	0.1	-2.8	-0.8	5.2	0.5	-2.0	0.0				
				Wind -X ecc.+	1.2	-0.5	2.0	-0.5	1.6	-0.0	1.3	0.8	-2.8	-0.5	1.2	0.0				
				Wind -X ecc.-	2.9	-0.5	3.2	-0.4	2.9	-0.1	2.8	0.8	-5.2	-0.5	2.0	-0.0				
				Wind +Y ecc.+	11.0	-0.2	11.0	-0.1	10.9	0.0	9.9	0.2	-21.0	-0.1	6.9	0.1				
				Wind +Y ecc.-	18.5	-0.1	16.2	-0.1	16.5	-0.2	16.6	-0.0	-32.1	0.1	10.3	-0.2				
				Wind -Y ecc.+	-11.0	0.2	-11.0	0.1	-10.9	-0.0	-9.9	-0.2	21.0	0.1	-6.9	-0.1				
				Wind -Y ecc.-	-18.5	0.1	-16.2	0.1	-16.5	0.2	-16.6	0.0	32.1	-0.1	-10.3	0.2				
				Earthquake X Mode 1	-32.8	1.2	-24.6	1.0	-22.7	1.1	-30.7	-1.5	42.0	0.8	-14.5	1.1				
				Earthquake X Mode 2	13.6	-7.5	31.6	-6.0	26.2	-0.1	14.2	10.5	-46.2	-6.5	19.3	0.9				
				Earthquake X Mode 3	21.0	0.1	17.4	0.1	15.9	-0.2	19.3	-0.3	-29.3	0.3	10.0	-0.2				
				Earthquake X Mode 4	8.4	-0.1	4.8	-0.0	1.2	-0.0	9.0	-0.0	1.3	0.0	1.0	-0.0				
				Earthquake X Mode 5	5.5	0.7	0.5	0.2	-0.7	0.0	5.6	0.3	2.8	-0.1	-0.5	-0.0				
				Earthquake X Mode 6	-3.2	-0.0	-2.0	-0.0	-0.5	0.0	-3.5	0.0	-0.7	-0.0	-0.4	0.0				
				Earthquake X Mode 7	-0.7	-0.0	3.8	-0.0	3.0	-0.0	-1.2	0.0	-5.0	-0.0	2.0	-0.0				
				Earthquake X Mode 8	0.7	-0.1	-3.4	-0.0	-2.7	0.0	1.1	0.1	4.5	-0.1	-1.8	0.0				
				Earthquake X Mode 9	0.6	-0.4	1.0	-0.3	0.9	0.0	0.5	0.5	-1.5	-0.4	0.7	0.0				
				Earthquake Y Mode 1	-14.9	0.6	-11.2	0.4	-10.3	0.5	-13.9	-0.7	19.0	0.4	-6.6	0.5				
				Earthquake Y Mode 2	4.2	-2.3	9.7	-1.9	8.1	-0.0	4.4	3.2	-14.3	-2.0	6.0	0.3				
				Earthquake Y Mode 3	129.0	0.9	107.3	0.8	98.0	-1.2	118.9	-2.0	-180.1	1.9	61.4	-1.2				
				Earthquake Y Mode 4	1.6	-0.0	0.9	-0.0	0.2	-0.0	1.7	-0.0	0.3	0.0	0.2	-0.0				
				Earthquake Y Mode 5	1.0	0.1	0.1	0.0	-0.1	0.0	1.0	0.0	0.5	-0.0	-0.1	-0.0				
				Earthquake Y Mode 6	-26.7	-0.1	-16.3	-0.0	-3.7	0.1	-28.8	0.0	-5.5	-0.1	-3.0	0.1				
				Earthquake Y Mode 7	-0.2	-0.0	1.1	-0.0	0.9	-0.0	-0.4	0.0	-1.5	-0.0	0.6	-0.0				
				Earthquake Y Mode 8	1.7	-0.1	-8.4	-0.1	-6.7	0.0	2.8	0.2	11.2	-0.1	-4.5	0.0				
				Earthquake Y Mode 9	0.2	-0.2	0.4	-0.1	0.3	0.0	0.2	0.2	-0.6	-0.1	0.2	0.0				
					Floor 2	30.0	3.00/6.00	Self weight	173.5	-1.3	-0.8	-1.0	-1.0	-0.0	153.5	1.8	5.2	-1.2	-0.3	0.1
								Dead load	65.3	-0.7	0.6	-0.6	-0.0	0.0	64.2	1.0	1.9	-0.7	-0.1	0.1
								Live load	38.2	-0.9	0.5	-0.7	0.1	-0.0	38.1	1.2	1.1	-0.8	0.3	0.0
								Wind +X ecc.+	-0.9	0.7	-1.8	0.5	-1.5	0.0	-1.1	-0.8	2.7	0.5	-1.2	-0.0
								Wind +X ecc.-	-4.1	0.7	-3.9	0.5	-3.3	0.1	-4.1	-0.8	5.7	0.5	-2.3	0.0
								Wind -X ecc.+	0.9	-0.7	1.8	-0.5	1.5	-0.0	1.1	0.8	-2.7	-0.5	1.2	0.0
								Wind -X ecc.-	4.1	-0.7	3.9	-0.5	3.3	-0.1	4.1	0.8	-5.7	-0.5	2.3	-0.0
Wind +Y ecc.+	20.6	-0.2	18.4					-0.2	14.8	-0.0	19.6	0.2	-25.1	-0.0	9.7	0.1				
Wind +Y ecc.-	35.2	-0.1	28.3					-0.1	23.1	-0.3	33.3	-0.0	-39.2	0.2	14.8	-0.3				
Wind -Y ecc.+	-20.6	0.2	-18.4					0.2	-14.8	0.0	-19.6	-0.2	25.1	0.0	-9.7	-0.1				
Wind -Y ecc.-	-35.2	0.1	-28.3					0.1	-23.1	0.3	-33.3	0.0	39.2	-0.2	-14.8	0.3				
Earthquake X Mode 1	-54.6	1.5	-35.3					1.0	-27.5	1.2	-52.9	-1.4	45.2	0.7	-17.9	1.1				
Earthquake X Mode 2	12.7	-8.9	28.8					-6.2	23.9	-0.1	14.4	9.3	-42.2	-6.0	18.0	0.9				
Earthquake X Mode 3	36.2	0.2	26.3					0.1	19.7	-0.2	34.9	-0.3	-31.4	0.3	12.7	-0.2				
Earthquake X Mode 4	7.1	0.1	-2.2					0.1	-3.7	0.1	8.1	-0.2	8.7	0.1	-2.3	0.1				
Earthquake X Mode 5	3.0	-0.4	0.3					-0.5	-0.5	0.0	3.4	1.3	1.9	-0.9	-0.1	0.1				
Earthquake X Mode 6	-2.6	-0.0	0.9					-0.0	1.6	-0.0	-3.1	-0.0	-3.7	0.0	1.0	-0.0				
Earthquake X Mode 7	0.3	-0.0	2.3					-0.0	0.5	-0.0	0.6	-0.0	0.7	0.0	0.4	-0.0				
Earthquake X Mode 8	-0.3	-0.0	-2.1					-0.0	-0.5	0.0	-0.5	-0.0	-0.7	-0.0	-0.4	0.0				
Earthquake X Mode 9	0.2	-0.2	0.4					-0.0	0.2	-0.0	0.3	-0.2	-0.3	0.1	0.2	0.0				
Earthquake Y Mode 1	-24.8	0.7	-16.0					0.5	-12.5	0.5	-24.0	-0.6	20.5	0.3	-8.1	0.5				
Earthquake Y Mode 2	3.9	-2.7	8.9					-1.9	7.4	-0.0	4.5	2.9	-13.0	-1.8	5.6	0.3				
Earthquake Y Mode 3	223.1	1.0	161.6					0.7	121.5	-1.5	215.1	-1.7	-193.5	2.0	78.5	-1.5				
Earthquake Y Mode 4	1.4	0.0	-0.4					0.0	-0.7	0.0	1.6	-0.0	1.7	0.0	-0.4	0.0				
Earthquake Y Mode 5	0.5	-0.1	0.0					-0.1	-0.1	0.0	0.6	0.2	0.3	-0.2	-0.0	0.0				
Earthquake Y Mode 6	-21.6	-0.1	7.6					-0.0	12.9	-0.1	-25.1	-0.1	-30.3	0.1	8.1	-0.0				
Earthquake Y Mode 7	0.1	-0.0	0.7					-0.0	0.2	-0.0	0.2	-0.0	0.2	0.0	0.1	-0.0				
Earthquake Y Mode 8	-0.8	-0.1	-5.2					-0.0	-1.1	0.0	-1.3	-0.1	-1.7	-0.0	-0.9	0.0				
Earthquake Y Mode 9	0.1	-0.1	0.2					-0.0	0.1	-0.0	0.1	-0.1	-0.1	0.0	0.1	0.0				
	Floor 1	30.0	0.00/3.00					Self weight	205.0	-0.4	5.5	-0.5	2.6	-0.0	186.0	1.1	1.2	-0.6	2.5	0.0
								Dead load	77.5	-0.3	1.6	-0.3	0.5	0.0	76.8	0.6	1.4	-0.3	0.4	0.0
								Live load	41.8	-0.3	3.7	-0.4	1.9	-0.0	42.2	0.8	-0.8	-0.4	1.7	0.0
								Wind +X ecc.+	-0.1	1.0	-0.7	0.5	-0.8	0.0	-0.3	-0.5	1.8	0.5	-0.7	-0.0
								Wind +X ecc.-	-5.3	1.0	-6.1	0.5	-3.6	0.1	-5.4	-0.5	4.5	0.4	-2.7	0.0
								Wind -X ecc.+	0.1	-1.0	0.7	-0.5	0.8	-0.0	0.3	0.5	-1.8	-0.5	0.7	0.0
								Wind -X ecc.-	5.3	-1.0	6.1	-0.5	3.6	-0.1	5.4	0.5	-4.5	-0.4	2.7	-0.0
				Wind +Y ecc.+	32.7	-0.2	39.2	-0.1	20.5	-0.0	32.4	0.1	-20.4	0.1	14.7	0.0				
				Wind +Y ecc.-	56.3	0.1	64.1	0.0	33.4	-0.2	55.7	-0.1	-33.0	0.3	23.9	-0.2				
				Wind -Y ecc.+	-32.7	0.2	-39.2	0.1	-20.5	0.0	-32.4	-0.1	20.4	-0.1	-14.7	-0.0				
				Wind -Y ecc.-	-56.3	-0.1	-64.1	-0.0	-33.4	0.2	-55.7	0.1	33.0	-0.3	-23.9	0.2				
				Earthquake X Mode 1	-78.1	1.4	-66.9	0.8	-34.8	0.8	-78.0	-0.7	33.9	0.3	-24.9	0.7				
				Earthquake X Mode 2	6.5	-11.1	18.4	-5.5	14.7	-0.1	9.1	4.6	-25.8	-4.3	11.6	0.7				
				Earthquake X Mode 3	53.4	0.4	49.8	0.2	24.9	-0.2	53.4	-0.2	-22.4	0.4	17.8	-0.2				
				Earthquake X Mode 4	3.3	0.2	-12.1	0.1	-7.1	0.1	3.9	-0.1	8.8	0.1	-5.0	0.1				
				Earthquake X Mode 5	-0.8	-1.6	-3.1	-0.9	-1.4	0.0	-0.3	1.0	0.8	-1.0	-0.7	0.1				
				Earthquake X Mode 6	-1.0	0.0	5.1	0.0	3.0	-0.0	-1.2	-0.0	-3.6	0.0	2.1	-0.0				
				Earthquake X Mode 7	-0.7	0.0	-4.8	0.0	-3.2	0.0	-0.2	-0.0	4.6	0.0	-2.3	0.0				
				Earthquake X Mode 8	0.6	0.1	4.4	0.0	3.0	-0.0	0.2	-0.1	-4.2	0.1	2.1	-0.0				
				Earthquake X Mode 9	0.3	0.5	-1.0	0.3	-0.7	-0.0	0.4	-0.5	1.2	0.4	-0.6	-0.0				
				Earthquake Y Mode 1	-35.4	0.6	-30.4	0.4	-15.8	0.4	-35.4	-0.3	15.4	0.1	-11.3	0.3				
				Earthquake Y Mode 2	2.0	-3.4	5.7	-1.7	4.5	-0.0	2.8	1.4	-8.0	-1.3	3.6	0.2				
				Earthquake Y Mode 3	328.6	2.6	306.7	1.0	153.3	-1.1	328.6	-1.1	-137.7	2.2	109.8	-1.1				
				Earthquake Y Mode 4	0.6	0.0	-2.3	0.0	-1.4	0.0	0.7	-0.0	1.7	0.0	-1.0	0.0				
				Earthquake Y Mode 5	-0.1	-0.3	-0.6	-0.2	-0.2	0.0	-0.1	0.2	0.1	-0.2	-0.1	0.0				
				Earthquake Y Mode 6	-8.2	0.2	41.8	0.1	24.4	-0.1	-10.2	-0.1	-29.6	0.2	17.2	-0.1				
				Earthquake Y Mode 7	-0.2	0.0	-1.4	0.0	-1.0	0.0	-0.1	-0.0	1.4	0.0	-0.7	0.0				
				Earthquake Y Mode 8	1.6	0.2	10.9	0.1	7.4	-0.0	0.4	-0.2	-10.5	0.2	5.2	-0.0				
				Earthquake Y Mode 9	0.1	0.2	-0.4	0.1	-0.3	-0.0	0.1	-0.2	0.4	0.2	-0.2	-0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
W4	techo	30.0	12.00/15.00	Self weight	37.1	3.4	4.8	2.2	2.5	-0.1	16.0	-3.5	-2.9	3.2	1.6	-0.2
				Dead load	27.4	1.4	0.1	1.1	0.3	0.1	25.5	-2.1	-1.1	1.6	0.4	-0.0
				Live load	2.8	2.0	-0.5	1.3	-0.4	-0.0	2.6	-2.1	0.4	1.9	-0.4	-0.1
				Wind +X ecc.+	-3.1	0.5	-0.1	0.5	-0.1	-0.0	-3.0	-1.2	0.2	0.9	-0.1	-0.0
				Wind +X ecc.-	-2.6	0.5	-0.7	0.5	-0.9	0.0	-2.6	-1.3	1.9	0.9	-0.6	-0.0
				Wind -X ecc.+	3.1	-0.5	0.1	-0.5	0.1	0.0	3.0	1.2	-0.2	-0.9	0.1	0.0
				Wind -X ecc.-	2.6	-0.5	0.7	-0.5	0.9	-0.0	2.6	1.3	-1.9	-0.9	0.6	0.0
				Wind +Y ecc.+	-3.6	-0.1	2.9	-0.0	4.6	0.1	-2.8	0.0	-10.2	-0.1	2.4	0.1
				Wind +Y ecc.-	-5.8	-0.1	5.6	-0.1	8.3	0.0	-4.5	0.1	-18.1	-0.1	4.4	0.0
				Wind -Y ecc.+	3.6	0.1	-2.9	0.0	-4.6	-0.1	2.8	-0.0	10.2	0.1	-2.4	-0.1
				Wind -Y ecc.-	5.8	0.1	-5.6	0.1	-8.3	-0.0	4.5	-0.1	18.1	0.1	-4.4	-0.0
				Earthquake X Mode 1	-3.8	1.8	-13.8	2.0	-16.7	0.4	-5.1	-4.5	33.9	3.3	-9.6	0.4
				Earthquake X Mode 2	39.1	-6.5	-0.6	-7.3	-0.1	0.4	37.0	17.1	-0.7	-12.1	0.4	1.0
				Earthquake X Mode 3	-6.4	0.1	8.4	0.2	10.8	0.0	-5.0	-0.4	-22.3	0.3	5.9	0.0
				Earthquake X Mode 4	2.1	-0.4	7.7	-0.4	7.2	-0.1	2.4	0.9	-12.8	-0.6	4.5	-0.1
				Earthquake X Mode 5	-4.5	1.6	2.9	1.6	2.5	-0.1	-4.1	-3.4	-4.3	2.5	1.5	-0.2
				Earthquake X Mode 6	-0.2	-0.0	-2.7	-0.0	-2.5	-0.0	-0.4	0.0	4.6	-0.0	-1.6	-0.0
				Earthquake X Mode 7	-1.3	0.1	-5.0	0.1	-3.6	0.0	-1.3	-0.2	5.2	0.1	-2.4	0.0
				Earthquake X Mode 8	0.8	0.1	4.0	0.1	2.8	0.0	0.9	-0.1	-4.2	0.1	1.9	0.0
				Earthquake X Mode 9	-0.7	0.6	-0.4	0.4	-0.3	-0.0	-0.7	-0.8	0.5	0.6	-0.2	-0.0
				Earthquake Y Mode 1	-1.7	0.8	-6.3	0.9	-7.6	0.2	-2.3	-2.1	15.4	1.5	-4.3	0.2
				Earthquake Y Mode 2	12.1	-2.0	-0.2	-2.3	-0.0	0.1	11.4	5.3	-0.2	-3.8	0.1	0.3
				Earthquake Y Mode 3	-39.2	0.6	51.8	1.0	66.3	0.1	-30.6	-2.6	-137.3	1.6	36.2	0.2
				Earthquake Y Mode 4	0.4	-0.1	1.5	-0.1	1.4	-0.0	0.5	0.2	-2.5	-0.1	0.9	-0.0
				Earthquake Y Mode 5	-0.8	0.3	0.5	0.3	0.5	-0.0	-0.8	-0.6	-0.8	0.4	0.3	-0.0
				Earthquake Y Mode 6	-1.8	-0.2	-22.2	-0.2	-20.9	-0.1	-2.9	0.4	37.6	-0.3	-12.8	-0.1
				Earthquake Y Mode 7	-0.4	0.0	-1.5	0.0	-1.1	0.0	-0.4	-0.1	1.6	0.0	-0.7	0.0
				Earthquake Y Mode 8	2.1	0.2	10.0	0.2	7.1	0.0	2.2	-0.3	-10.4	0.3	4.8	0.0
				Earthquake Y Mode 9	-0.3	0.2	-0.1	0.2	-0.1	-0.0	-0.2	-0.3	0.2	0.2	-0.1	-0.0
	Floor 4	30.0	9.00/12.00	Self weight	77.1	4.0	-2.5	3.2	-2.5	-0.1	57.1	-5.9	5.3	4.0	-2.5	0.1
				Dead load	31.2	0.9	2.6	0.7	2.2	-0.0	30.8	-1.3	-3.4	0.8	1.2	0.0
				Live load	13.3	2.5	0.0	1.9	0.3	-0.1	12.9	-3.5	-0.6	2.4	-0.2	0.0
				Wind +X ecc.+	-3.2	0.3	-0.2	0.3	-0.1	-0.0	-3.2	-0.5	0.1	0.3	-0.1	0.0
				Wind +X ecc.-	-2.7	0.3	-1.2	0.3	-1.3	0.0	-2.5	-0.5	2.6	0.3	-0.8	0.0
				Wind -X ecc.+	3.2	-0.3	0.2	-0.3	0.1	0.0	3.2	0.5	-0.1	-0.3	0.1	-0.0
				Wind -X ecc.-	2.7	-0.3	1.2	-0.3	1.3	-0.0	2.5	0.5	-2.6	-0.3	0.8	-0.0
				Wind +Y ecc.+	-4.4	-0.1	6.8	-0.1	7.8	0.2	-5.4	0.1	-16.2	-0.0	4.6	0.2
				Wind +Y ecc.-	-6.9	-0.2	11.4	-0.1	13.1	0.1	-8.6	0.2	-27.3	-0.0	7.8	0.1
				Wind -Y ecc.+	4.4	0.1	-6.8	0.1	-7.8	-0.2	5.4	-0.1	16.2	0.0	-4.6	-0.2
				Wind -Y ecc.-	6.9	0.2	-11.4	0.1	-13.1	-0.1	8.6	-0.2	27.3	0.0	-7.8	-0.1
				Earthquake X Mode 1	-4.8	1.4	-20.1	1.2	-20.5	0.5	-1.9	-2.2	40.5	1.2	-12.2	0.7
				Earthquake X Mode 2	39.1	-4.4	2.6	-3.6	2.8	0.6	37.8	6.4	-5.0	-4.1	1.8	0.5
				Earthquake X Mode 3	-6.5	-0.0	14.3	-0.0	14.6	0.1	-8.3	-0.0	-29.0	0.1	8.7	0.1
				Earthquake X Mode 4	4.3	-0.3	9.0	-0.2	5.7	-0.0	3.7	0.2	-7.8	-0.1	3.6	-0.1
				Earthquake X Mode 5	-3.3	1.1	2.8	0.6	1.6	-0.1	-3.3	-0.6	-1.9	0.5	1.0	-0.1
				Earthquake X Mode 6	-1.1	-0.0	-3.5	-0.0	-2.2	-0.0	-0.8	0.0	3.0	-0.0	-1.4	-0.0
				Earthquake X Mode 7	-1.7	0.0	-1.4	-0.0	0.4	-0.0	-1.9	0.1	-2.4	-0.0	0.3	-0.0
				Earthquake X Mode 8	1.2	0.0	1.2	-0.0	-0.3	0.0	1.4	0.1	1.9	-0.0	-0.2	0.0
				Earthquake X Mode 9	-0.7	0.1	-0.4	-0.1	-0.2	0.0	-0.7	0.4	0.1	-0.2	-0.1	0.0
				Earthquake Y Mode 1	-2.2	0.7	-9.1	0.6	-9.3	0.2	-0.9	-1.0	18.4	0.6	-5.5	0.3
				Earthquake Y Mode 2	12.1	-1.4	0.8	-1.1	0.9	0.2	11.7	2.0	-1.6	-1.3	0.5	0.2
				Earthquake Y Mode 3	-40.0	-0.1	88.1	-0.1	90.0	0.6	-51.3	-0.1	-178.5	0.6	53.8	0.4
				Earthquake Y Mode 4	0.8	-0.1	1.7	-0.0	1.1	-0.0	0.7	0.0	-1.5	-0.0	0.7	-0.0
				Earthquake Y Mode 5	-0.6	0.2	0.5	0.1	0.3	-0.0	-0.6	-0.1	-0.4	0.1	0.2	-0.0
				Earthquake Y Mode 6	-8.7	-0.1	-28.5	-0.0	-18.0	-0.1	-6.9	0.0	24.8	-0.1	-11.4	-0.1
				Earthquake Y Mode 7	-0.5	0.0	-0.4	-0.0	0.1	-0.0	-0.6	0.0	-0.7	-0.0	0.1	-0.0
				Earthquake Y Mode 8	3.0	0.0	3.1	-0.0	-0.7	0.0	3.4	0.2	4.8	-0.1	-0.5	0.0
				Earthquake Y Mode 9	-0.3	0.0	-0.1	-0.0	-0.1	0.0	-0.3	0.1	0.0	-0.1	-0.0	0.0
	Floor 3	30.0	6.00/9.00	Self weight	116.1	3.5	-1.2	2.7	-0.1	-0.1	95.5	-4.6	0.3	3.1	-0.7	0.1
				Dead load	34.3	0.8	1.7	0.6	1.1	-0.0	34.1	-1.0	-1.4	0.7	0.5	0.0
				Live load	22.9	2.2	-0.6	1.7	-0.1	-0.1	22.6	-3.0	0.1	2.0	-0.5	0.0
				Wind +X ecc.+	-3.2	0.5	-0.1	0.5	-0.1	-0.0	-3.1	-0.9	0.1	0.6	-0.1	0.0
				Wind +X ecc.-	-3.1	0.6	-2.0	0.5	-1.9	0.0	-2.8	-0.9	3.6	0.6	-1.1	0.0
				Wind -X ecc.+	3.2	-0.5	0.1	-0.5	0.1	0.0	3.1	0.9	-0.1	-0.6	0.1	-0.0
				Wind -X ecc.-	3.1	-0.6	2.0	-0.5	1.9	-0.0	2.8	0.9	-3.6	-0.6	1.1	-0.0
				Wind +Y ecc.+	-2.0	-0.0	12.1	-0.0	11.8	0.2	-3.6	0.0	-22.7	0.1	7.1	0.2
				Wind +Y ecc.-	-2.7	-0.1	20.5	-0.1	20.0	0.1	-5.4	0.1	-38.6	0.0	12.0	0.1
				Wind -Y ecc.+	2.0	0.0	-12.1	0.0	-11.8	-0.2	3.6	-0.0	22.7	-0.1	-7.1	-0.2
				Wind -Y ecc.-	2.7	0.1	-20.5	0.1	-20.0	-0.1	5.4	-0.1	38.6	-0.0	-12.0	-0.1
				Earthquake X Mode 1	-11.7	2.2	-31.6	1.8	-28.7	0.6	-7.7	-3.1	53.0	2.0	-17.4	0.8
				Earthquake X Mode 2	39.0	-6.9	3.8	-5.6	3.4	0.7	37.7	10.2	-5.8	-7.1	2.1	0.6
				Earthquake X Mode 3	-1.9	0.1	22.4	0.1	20.1	0.1	-4.5	-0.2	-36.9	0.3	12.1	0.1
				Earthquake X Mode 4	5.2	-0.2	5.5	-0.1	1.6	-0.0	5.3	-0.0	0.5	0.0	1.1	-0.0
				Earthquake X Mode 5	-3.0	0.6	1.5	0.2	0.2	-0.0	-2.9	0.2	0.7	-0.0	0.2	-0.0
				Earthquake X Mode 6	-1.4	-0.0	-2.1	0.0	-0.6	-0.0	-1.5	-0.0	-0.3	-0.0	-0.4	-0.0
				Earthquake X Mode 7	-0.4	-0.1	4.1	-0.1	3.3	-0.0	-0.9	0.1	-5.3	-0.1	2.2	-0.0
				Earthquake X Mode 8	-0.0	-0.1	-3.5	-0.1	-2.8	-0.0	0.4	0.1	4.6	-0.1	-1.9	-0.0
				Earthquake X Mode 9	-0.9	-0.4	0.4	-0.3	0.3	0.0	-1.0	0.5	-0.6	-0.4	0.2	0.0
				Earthquake Y Mode 1	-5.3	1.0	-14.4	0.8	-13.0	0.3	-3.5	-1.4	24.0	0.9	-7.9	0.4
				Earthquake Y Mode 2	12.0	-2.1	1.2	-1.7	1.1	0.2	11.6	3.2	-1.8	-2.2	0.6	0.2
			Earthquake Y Mode 3	-11.7	0.6	138.1	0.4	123.5	0.7	-27.5	-1.3	-226.9	1.7	74.6	0.5	
Earthquake Y Mode 4	1.0	-0.0	1.1	-0.0	0.3	-0.0	1.0	-0.0	0.1	0.0	0.2	-0.0				
Earthquake Y Mode 5	-0.5	0.1	0.3	0.0	0.0	-0.0	-0.5	0.0	0.1	-0.0	0.0	-0.0				
Earthquake Y Mode 6	-11.6	-0.0	-17.6	0.0	-5.0	-0.1	-12.0	-0.1	-2.2	-0.0	-3.4	-0.0				
Earthquake Y Mode 7	-0.1	-0.0	1.2	-0.0	1.0	-0.0	-0.3	0.0	-1.6	-0.0	0.7	-0.0				
Earthquake Y Mode 8	-0.0	-0.2	-8.8	-0.1	-7.0	-0.0	1.0	0.2	11.5	-0.2	-4.7	-0.0				
Earthquake Y Mode 9	-0.3	-0.1	0.1	-0.1	0.1	0.0	-0.4	0.2	-0.2	-0.1	0.1	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 2	30.0	3.00/6.00	Self weight	155.5	3.1	1.7	2.4	1.6	-0.1	134.6	-4.2	-1.5	2.8	0.5	0.1				
				Dead load	37.3	0.6	1.9	0.5	1.2	-0.0	37.1	-0.9	-1.3	0.6	0.6	0.0				
				Live load	32.6	2.1	1.3	1.6	1.1	-0.1	32.1	-2.8	-1.6	1.9	0.4	0.0				
				Wind +X ecc.+	-3.0	0.7	-0.0	0.5	-0.0	-0.0	-2.9	-0.9	0.1	0.6	-0.0	0.0				
				Wind +X ecc.-	-3.8	0.7	-2.9	0.5	-2.4	0.0	-3.4	-0.9	4.1	0.6	-1.5	0.0				
				Wind -X ecc.+	3.0	-0.7	0.0	-0.5	0.0	0.0	2.9	0.9	-0.1	-0.6	0.0	-0.0				
				Wind -X ecc.-	3.8	-0.7	2.9	-0.5	2.4	-0.0	3.4	0.9	-4.1	-0.6	1.5	-0.0				
				Wind +Y ecc.+	4.2	0.0	19.2	0.0	15.5	0.3	2.2	-0.0	-26.6	0.1	9.5	0.3				
				Wind +Y ecc.-	8.0	-0.1	32.3	-0.1	26.4	0.1	4.5	0.0	-45.5	0.1	16.1	0.1				
				Wind -Y ecc.+	-4.2	-0.0	-19.2	-0.0	-15.5	-0.3	-2.2	0.0	26.6	-0.1	-9.5	-0.3				
				Wind -Y ecc.-	-8.0	0.1	-32.3	0.1	-26.4	-0.1	-4.5	-0.0	45.5	-0.1	-16.1	-0.1				
				Earthquake X Mode 1	-24.7	2.5	-42.8	1.8	-33.3	0.5	-20.3	-2.7	55.4	1.8	-20.4	0.8				
				Earthquake X Mode 2	37.1	-8.0	4.0	-5.6	3.2	0.7	35.9	9.0	-5.1	-6.5	1.9	0.6				
				Earthquake X Mode 3	7.6	0.2	30.6	0.1	23.4	0.1	4.7	-0.2	-38.4	0.3	14.3	0.1				
				Earthquake X Mode 4	3.4	0.1	-2.4	0.1	-4.0	0.0	4.2	-0.3	9.0	0.2	-2.5	0.1				
				Earthquake X Mode 5	-4.4	-0.4	-1.1	-0.5	-1.5	0.0	-4.1	1.3	3.3	-0.9	-0.9	0.0				
				Earthquake X Mode 6	-0.6	0.0	1.0	0.0	1.6	0.0	-1.0	-0.0	-3.6	0.0	1.0	0.0				
				Earthquake X Mode 7	0.6	-0.0	2.3	-0.0	0.5	0.0	0.6	-0.0	0.6	0.0	0.3	0.0				
				Earthquake X Mode 8	-0.9	-0.0	-2.0	-0.0	-0.5	-0.0	-1.0	-0.0	-0.5	0.0	-0.3	-0.0				
				Earthquake X Mode 9	-1.0	-0.2	0.4	-0.0	0.2	0.0	-1.0	-0.1	-0.1	0.0	0.1	0.0				
				Earthquake Y Mode 1	-11.2	1.1	-19.4	0.8	-15.1	0.2	-9.2	-1.2	25.1	0.8	-9.2	0.4				
				Earthquake Y Mode 2	11.5	-2.5	1.2	-1.7	1.0	0.2	11.1	2.8	-1.6	-2.0	0.6	0.2				
				Earthquake Y Mode 3	46.6	1.2	188.3	0.7	143.8	0.8	28.9	-1.5	-236.2	2.0	88.0	0.6				
				Earthquake Y Mode 4	0.7	0.0	-0.5	0.0	-0.8	0.0	0.8	-0.1	1.7	0.0	-0.5	0.0				
				Earthquake Y Mode 5	-0.8	-0.1	-0.2	-0.1	-0.3	0.0	-0.7	0.2	0.6	-0.2	-0.2	0.0				
				Earthquake Y Mode 6	-5.2	0.1	8.1	0.1	13.1	0.0	-7.9	-0.3	-29.5	0.2	8.2	0.0				
				Earthquake Y Mode 7	0.2	-0.0	0.7	-0.0	0.2	0.0	0.2	-0.0	0.2	0.0	0.1	0.0				
				Earthquake Y Mode 8	-2.3	-0.1	-5.1	-0.0	-1.2	-0.0	-2.4	-0.0	-1.3	0.0	-0.8	-0.0				
				Earthquake Y Mode 9	-0.4	-0.1	0.1	-0.0	0.1	0.0	-0.4	-0.0	-0.0	0.0	0.0	0.0				
					Floor 1	30.0	0.00/3.00	Self weight	195.8	1.2	6.1	1.3	2.9	-0.1	174.6	-2.5	-0.5	1.4	1.6	0.1
								Dead load	40.1	0.2	2.0	0.2	0.9	-0.0	39.9	-0.5	-0.2	0.3	0.5	0.0
								Live load	42.8	0.8	3.7	0.9	1.8	-0.1	42.2	-1.8	-0.9	1.0	0.9	0.0
								Wind +X ecc.+	-2.4	1.0	0.2	0.5	0.1	-0.0	-2.4	-0.6	-0.0	0.6	0.1	0.0
								Wind +X ecc.-	-4.7	1.1	-5.8	0.5	-3.1	0.0	-4.4	-0.6	3.4	0.5	-2.1	0.0
								Wind -X ecc.+	2.4	-1.0	-0.2	-0.5	-0.1	0.0	2.4	0.6	0.0	-0.6	-0.1	-0.0
								Wind -X ecc.-	4.7	-1.1	5.8	-0.5	3.1	-0.0	4.4	0.6	-3.4	-0.5	2.1	-0.0
Wind +Y ecc.+	13.7	0.0	38.8					0.0	20.7	0.2	12.0	-0.1	-21.9	0.1	14.1	0.2				
Wind +Y ecc.-	24.3	-0.1	66.6					-0.0	35.7	0.1	21.4	-0.0	-38.0	0.2	24.3	0.1				
Wind -Y ecc.+	-13.7	-0.0	-38.8					-0.0	-20.7	-0.2	-12.0	0.1	21.9	-0.1	-14.1	-0.2				
Wind -Y ecc.-	-24.3	0.1	-66.6					0.0	-35.7	-0.1	-21.4	0.0	38.0	-0.2	-24.3	-0.1				
Earthquake X Mode 1	-41.8	3.2	-74.9					1.6	-39.4	0.3	-38.5	-1.4	40.7	1.3	-26.8	0.5				
Earthquake X Mode 2	33.6	-10.0	3.5					-5.0	1.9	0.4	32.9	4.8	-2.0	-4.9	1.2	0.3				
Earthquake X Mode 3	20.4	0.3	52.2					0.1	27.1	0.1	18.3	-0.2	-27.4	0.3	18.4	0.1				
Earthquake X Mode 4	-0.2	0.4	-13.1					0.2	-7.7	0.0	0.6	-0.2	9.4	0.2	-5.3	0.1				
Earthquake X Mode 5	-6.8	-1.4	-4.7					-0.8	-2.8	0.0	-6.5	1.0	3.3	-1.0	-1.9	0.0				
Earthquake X Mode 6	0.9	0.0	5.2					0.0	3.1	0.0	0.6	-0.0	-3.7	0.0	2.1	0.0				
Earthquake X Mode 7	-0.3	0.1	-5.1					0.1	-3.5	0.0	0.1	-0.1	4.9	0.1	-2.5	0.0				
Earthquake X Mode 8	-0.1	0.1	4.4					0.1	3.0	0.0	-0.5	-0.1	-4.3	0.1	2.1	0.0				
Earthquake X Mode 9	-0.8	0.5	-0.6					0.3	-0.4	-0.0	-0.8	-0.5	0.6	0.4	-0.3	-0.0				
Earthquake Y Mode 1	-18.9	1.4	-34.0					0.7	-17.9	0.1	-17.5	-0.6	18.5	0.6	-12.1	0.2				
Earthquake Y Mode 2	10.4	-3.1	1.1					-1.5	0.6	0.1	10.2	1.5	-0.6	-1.5	0.4	0.1				
Earthquake Y Mode 3	125.6	1.6	321.5					0.7	167.1	0.6	112.9	-1.1	-168.7	1.8	113.3	0.4				
Earthquake Y Mode 4	-0.0	0.1	-2.5					0.0	-1.5	0.0	0.1	-0.0	1.8	0.0	-1.0	0.0				
Earthquake Y Mode 5	-1.2	-0.3	-0.9					-0.1	-0.5	0.0	-1.2	0.2	0.6	-0.2	-0.3	0.0				
Earthquake Y Mode 6	7.7	0.2	42.5					0.1	25.1	0.1	5.1	-0.2	-30.6	0.3	17.1	0.0				
Earthquake Y Mode 7	-0.1	0.0	-1.5					0.0	-1.0	0.0	0.0	-0.0	1.5	0.0	-0.7	0.0				
Earthquake Y Mode 8	-0.3	0.2	11.1					0.1	7.6	0.0	-1.1	-0.2	-10.8	0.2	5.4	0.0				
Earthquake Y Mode 9	-0.3	0.2	-0.2					0.1	-0.1	-0.0	-0.3	-0.2	0.2	0.1	-0.1	-0.0				
W5	techo	30.0	12.00/15.00					Self weight	41.4	4.4	6.4	3.2	4.5	-0.0	19.9	-5.7	-6.1	4.8	3.1	-0.1
								Dead load	27.4	1.4	0.8	1.0	1.3	0.0	25.4	-1.8	-2.7	1.5	0.7	0.0
								Live load	4.5	2.4	-0.1	1.6	0.0	-0.0	4.1	-2.7	-0.1	2.4	0.0	-0.1
								Wind +X ecc.+	-3.2	0.5	0.3	0.5	0.3	0.0	-3.1	-1.3	-0.6	0.9	0.2	-0.0
								Wind +X ecc.-	-3.5	0.5	-0.3	0.5	-0.6	0.0	-3.3	-1.2	1.2	0.9	-0.3	0.0
								Wind -X ecc.+	3.2	-0.5	-0.3	-0.5	-0.3	-0.0	3.1	1.3	0.6	-0.9	-0.2	0.0
								Wind -X ecc.-	3.5	-0.5	0.3	-0.5	0.6	-0.0	3.3	1.2	-1.2	-0.9	0.3	-0.0
				Wind +Y ecc.+	3.2	0.0	3.0	0.0	4.7	0.1	2.5	0.0	-10.5	-0.0	2.6	0.1				
				Wind +Y ecc.-	4.8	0.1	5.9	0.1	8.5	0.0	3.6	-0.2	-18.7	0.1	4.8	0.0				
				Wind -Y ecc.+	-3.2	-0.0	-3.0	-0.0	-4.7	-0.1	-2.5	-0.0	10.5	0.0	-2.6	-0.1				
				Wind -Y ecc.-	-4.8	-0.1	-5.9	-0.1	-8.5	-0.0	-3.6	0.2	18.7	-0.1	-4.8	-0.0				
				Earthquake X Mode 1	-14.5	1.2	-12.6	1.5	-15.7	0.5	-12.3	-3.6	32.4	2.5	-9.3	0.5				
				Earthquake X Mode 2	43.8	-7.0	-6.8	-7.8	-5.5	0.3	41.8	18.2	9.5	-12.9	-4.0	0.6				
				Earthquake X Mode 3	2.8	0.4	8.8	0.4	11.1	0.0	1.6	-0.7	-23.3	0.5	6.5	0.0				
				Earthquake X Mode 4	-0.1	-0.3	7.5	-0.3	7.0	-0.1	-0.4	0.6	-12.7	-0.5	4.5	-0.1				
				Earthquake X Mode 5	-5.9	1.8	3.8	1.7	3.4	-0.1	-5.8	-3.6	-6.0	2.7	2.2	-0.1				
				Earthquake X Mode 6	0.5	-0.0	-2.7	-0.0	-2.6	-0.0	0.6	0.1	4.7	-0.1	-1.6	-0.0				
				Earthquake X Mode 7	1.0	0.1	-4.9	0.1	-3.5	0.0	1.1	-0.1	5.2	0.1	-2.4	0.0				
				Earthquake X Mode 8	-1.0	0.1	4.0	0.1	2.9	0.0	-1.1	-0.1	-4.3	0.1	2.0	0.0				
				Earthquake X Mode 9	-0.6	0.6	-0.2	0.5	-0.2	-0.0	-0.6	-0.9	0.2	0.7	-0.1	-0.0				
				Earthquake Y Mode 1	-6.6	0.5	-5.7	0.7	-7.1	0.2	-5.6	-1.6	14.7	1.1	-4.2	0.2				
				Earthquake Y Mode 2	13.5	-2.2	-2.1	-2.4	-1.7	0.1	12.9	5.6	2.9	-4.0	-1.2	0.2				
Earthquake Y Mode 3	17.1	2.3	54.2	2.2	68.5	0.2	9.7	-4.6	-143.2	3.3	40.1	0.2								
Earthquake Y Mode 4	-0.0	-0.1	1.5	-0.1	1.3	-0.0	-0.1	0.1	-2.4	-0.1	0.9	-0.0								
Earthquake Y Mode 5	-1.1	0.3	0.7	0.3	0.6	-0.0	-1.1	-0.7	-1.1	0.5	0.4	-0.0								
Earthquake Y Mode 6	3.7	-0.4	-22.4	-0.3	-21.1	-0.1	4.8	0.6	38.4	-0.4	-13.5	-0.1								
Earthquake Y Mode 7	0.3	0.0	-1.5	0.0	-1.1	0.0	0.3	-0.0	1.6	0.0	-0.7	0.0								
Earthquake Y Mode 8	-2.5	0.3	10.0	0.2	7.1	0.0	-2.6	-0.4	-10.6	0.3	4.9	0.0								
Earthquake Y Mode 9	-0.2	0.2	-0.1	0.2	-0.1	-0.0	-0.2	-0.3	0.1	0.3	-0.0	-0.0								



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 4	30.0	9.00/12.00	Self weight	82.7	4.6	-1.7	3.5	-2.1	0.0	62.2	-6.2	4.6	4.3	-1.5	0.3
				Dead load	30.8	1.1	2.1	0.9	1.7	0.0	30.5	-1.7	-2.7	1.1	1.1	0.1
				Live load	15.5	2.9	0.7	2.3	0.7	0.0	15.0	-4.0	-1.1	2.8	0.5	0.2
				Wind +X ecc.+	-3.3	0.3	0.4	0.3	0.3	0.0	-3.3	-0.5	-0.6	0.3	0.2	0.0
				Wind +X ecc.-	-3.7	0.3	-0.7	0.3	-0.9	0.0	-3.6	-0.5	1.8	0.3	-0.4	0.0
				Wind -X ecc.+	3.3	-0.3	-0.4	-0.3	-0.3	-0.0	3.3	0.5	0.6	-0.3	-0.2	-0.0
				Wind -X ecc.-	3.7	-0.3	0.7	-0.3	0.9	-0.0	3.6	0.5	-1.8	-0.3	0.4	-0.0
				Wind +Y ecc.+	3.9	0.1	6.8	0.0	7.8	0.2	3.3	-0.1	-16.0	0.1	4.1	0.2
				Wind +Y ecc.-	5.7	0.2	11.6	0.1	13.2	0.1	4.7	-0.3	-26.9	0.3	6.9	0.1
				Wind -Y ecc.+	-3.9	-0.1	-6.8	-0.0	-7.8	-0.2	-3.3	0.1	16.0	-0.1	-4.1	-0.2
				Wind -Y ecc.-	-5.7	-0.2	-11.6	-0.1	-13.2	-0.1	-4.7	0.3	26.9	-0.3	-6.9	-0.1
				Earthquake X Mode 1	-13.9	0.7	-18.8	0.6	-19.4	0.5	-12.4	-0.9	37.9	0.4	-10.2	0.7
				Earthquake X Mode 2	46.3	-4.6	-4.0	-3.8	-2.5	0.4	45.0	6.9	4.2	-4.5	-1.9	0.3
				Earthquake X Mode 3	2.7	0.3	14.7	0.3	14.9	0.1	1.8	-0.5	-28.9	0.5	8.0	0.1
				Earthquake X Mode 4	-2.2	-0.2	8.9	-0.1	5.5	-0.0	-2.2	0.0	-7.5	-0.0	3.2	-0.1
				Earthquake X Mode 5	-6.2	1.2	3.3	0.6	2.0	-0.0	-6.0	-0.7	-2.7	0.6	1.2	-0.0
				Earthquake X Mode 6	1.2	-0.0	-3.5	-0.0	-2.2	-0.0	1.2	0.0	3.0	-0.0	-1.3	-0.0
				Earthquake X Mode 7	1.4	0.0	-1.4	-0.0	0.4	-0.0	1.2	0.1	-2.3	-0.0	0.3	-0.0
				Earthquake X Mode 8	-1.3	0.0	1.2	-0.0	-0.3	0.0	-1.1	0.1	1.9	-0.0	-0.2	0.0
				Earthquake X Mode 9	-0.5	0.1	-0.3	-0.1	-0.1	0.0	-0.5	0.4	0.0	-0.2	-0.1	-0.0
				Earthquake Y Mode 1	-6.3	0.3	-8.5	0.3	-8.8	0.2	-5.6	-0.4	17.2	0.2	-4.6	0.3
				Earthquake Y Mode 2	14.3	-1.4	-1.2	-1.2	-0.8	0.1	13.9	2.1	1.3	-1.4	-0.6	0.1
				Earthquake Y Mode 3	16.6	2.0	90.3	1.6	91.5	0.6	11.0	-3.3	-178.0	2.9	49.0	0.6
				Earthquake Y Mode 4	-0.4	-0.0	1.7	-0.0	1.1	-0.0	-0.4	0.0	-1.5	-0.0	0.6	-0.0
				Earthquake Y Mode 5	-1.1	0.2	0.6	0.1	0.4	-0.0	-1.1	-0.1	-0.5	0.1	0.2	-0.0
				Earthquake Y Mode 6	9.9	-0.3	-28.5	-0.2	-18.0	-0.1	9.9	0.3	24.7	-0.4	-10.6	-0.1
				Earthquake Y Mode 7	0.4	0.0	-0.4	-0.0	0.1	-0.0	0.4	0.0	-0.7	-0.0	0.1	-0.0
				Earthquake Y Mode 8	-3.3	0.0	3.1	-0.0	-0.7	0.0	-2.9	0.1	4.7	-0.1	-0.5	0.0
				Earthquake Y Mode 9	-0.2	0.0	-0.1	-0.0	-0.0	0.0	-0.2	0.1	0.0	-0.1	-0.0	-0.0
	Floor 3	30.0	6.00/9.00	Self weight	124.2	4.1	0.3	3.2	1.0	0.0	103.1	-5.5	-1.5	3.8	0.7	0.2
				Dead load	34.1	0.9	1.3	0.7	0.8	0.0	33.9	-1.1	-0.8	0.8	0.4	0.1
				Live load	25.9	2.6	0.6	2.0	0.8	0.0	25.4	-3.5	-1.5	2.4	0.5	0.1
				Wind +X ecc.+	-3.4	0.5	0.4	0.5	0.3	0.0	-3.3	-0.9	-0.6	0.6	0.2	0.0
				Wind +X ecc.-	-3.4	0.5	-1.5	0.4	-1.5	0.0	-3.2	-0.8	2.8	0.6	-0.8	0.1
				Wind -X ecc.+	3.4	-0.5	-0.4	-0.5	-0.3	-0.0	3.3	0.9	0.6	-0.6	-0.2	-0.0
				Wind -X ecc.-	3.4	-0.5	1.5	-0.4	1.5	-0.0	3.2	0.8	-2.8	-0.6	0.8	-0.1
				Wind +Y ecc.+	1.5	0.0	12.2	0.0	11.8	0.2	0.9	-0.1	-22.5	0.1	6.5	0.2
				Wind +Y ecc.-	1.4	0.2	20.7	0.1	20.1	0.1	0.4	-0.3	-38.3	0.4	11.1	0.1
				Wind -Y ecc.+	-1.5	-0.0	-12.2	-0.0	-11.8	-0.2	-0.9	0.1	22.5	-0.1	-6.5	-0.2
				Wind -Y ecc.-	-1.4	-0.2	-20.7	-0.1	-20.1	-0.1	-0.4	0.3	38.3	-0.4	-11.1	-0.1
				Earthquake X Mode 1	-6.9	1.3	-30.4	1.1	-27.6	0.6	-5.5	-1.8	50.5	1.0	-15.3	0.8
				Earthquake X Mode 2	46.8	-7.4	-2.3	-6.0	-1.8	0.5	45.6	10.9	3.7	-7.7	-1.6	0.3
				Earthquake X Mode 3	-1.9	0.4	22.8	0.3	20.3	0.1	-2.7	-0.6	-36.9	0.6	11.3	0.1
				Earthquake X Mode 4	-3.0	-0.1	5.5	-0.0	1.6	-0.0	-2.8	-0.1	0.6	0.0	0.9	-0.0
				Earthquake X Mode 5	-6.4	0.7	1.9	0.2	0.5	-0.0	-6.2	0.2	0.1	0.0	0.3	-0.0
				Earthquake X Mode 6	1.5	-0.0	-2.1	-0.0	-0.6	-0.0	1.4	0.0	-0.2	-0.0	-0.3	-0.0
				Earthquake X Mode 7	0.1	-0.1	4.1	-0.0	3.2	-0.0	-0.1	0.1	-5.3	-0.0	2.2	-0.0
				Earthquake X Mode 8	-0.3	-0.1	-3.5	-0.0	-2.8	-0.0	-0.2	0.1	4.5	-0.1	-1.8	-0.0
				Earthquake X Mode 9	-0.9	-0.4	0.4	-0.3	0.4	0.0	-0.9	0.5	-0.7	-0.4	0.3	0.0
				Earthquake Y Mode 1	-3.1	0.6	-13.8	0.5	-12.5	0.3	-2.5	-0.8	22.9	0.5	-6.9	0.4
				Earthquake Y Mode 2	14.5	-2.3	-0.7	-1.8	-0.5	0.1	14.1	3.4	1.2	-2.4	-0.5	0.1
				Earthquake Y Mode 3	-11.9	2.4	140.2	1.9	125.1	0.8	-16.7	-4.0	-227.2	3.7	69.6	0.7
				Earthquake Y Mode 4	-0.6	-0.0	1.1	-0.0	0.3	-0.0	-0.5	-0.0	0.1	0.0	0.2	-0.0
				Earthquake Y Mode 5	-1.2	0.1	0.3	0.0	0.1	-0.0	-1.1	0.0	0.0	0.0	0.1	-0.0
				Earthquake Y Mode 6	12.6	-0.2	-17.6	-0.1	-5.1	-0.1	11.7	0.1	-1.8	-0.2	-2.9	-0.1
				Earthquake Y Mode 7	0.0	-0.0	1.2	-0.0	1.0	-0.0	-0.0	0.0	-1.6	-0.0	0.6	-0.0
				Earthquake Y Mode 8	-0.7	-0.2	-8.7	-0.1	-6.9	-0.0	-0.4	0.2	11.3	-0.2	-4.6	-0.0
				Earthquake Y Mode 9	-0.3	-0.2	0.2	-0.1	0.1	0.0	-0.3	0.2	-0.3	-0.1	0.1	0.0
	Floor 2	30.0	3.00/6.00	Self weight	164.0	4.0	3.5	3.0	3.0	0.0	142.5	-5.2	-4.0	3.6	1.9	0.2
				Dead load	37.2	0.8	1.7	0.6	1.1	0.0	36.9	-1.1	-1.1	0.7	0.6	0.1
				Live load	35.6	2.7	2.5	2.0	2.1	0.0	35.0	-3.4	-3.4	2.4	1.4	0.1
				Wind +X ecc.+	-3.2	0.7	0.3	0.5	0.3	0.0	-3.2	-0.9	-0.5	0.6	0.2	0.0
				Wind +X ecc.-	-2.3	0.7	-2.5	0.5	-2.1	0.0	-2.1	-0.8	3.5	0.6	-1.2	0.1
				Wind -X ecc.+	3.2	-0.7	-0.3	-0.5	-0.3	-0.0	3.2	0.9	0.5	-0.6	-0.2	-0.0
				Wind -X ecc.-	2.3	-0.7	2.5	-0.5	2.1	-0.0	2.1	0.8	-3.5	-0.6	1.2	-0.1
				Wind +Y ecc.+	-4.5	-0.0	19.0	-0.0	15.5	0.3	-4.8	-0.1	-26.4	0.2	8.9	0.3
				Wind +Y ecc.-	-9.0	0.1	32.1	0.1	26.3	0.2	-9.6	-0.3	-45.2	0.4	15.1	0.1
				Wind -Y ecc.+	4.5	0.0	-19.0	0.0	-15.5	-0.3	4.8	0.1	26.4	-0.2	-8.9	-0.3
				Wind -Y ecc.-	9.0	-0.1	-32.1	-0.1	-26.3	-0.2	9.6	0.3	-45.2	-0.4	-15.1	-0.1
				Earthquake X Mode 1	7.0	1.7	-41.6	1.2	-32.3	0.6	7.7	-1.6	53.5	0.9	-18.4	0.8
				Earthquake X Mode 2	44.3	-8.7	0.1	-6.0	-0.4	0.5	43.2	9.6	2.3	-7.2	-0.7	0.3
				Earthquake X Mode 3	-11.0	0.4	30.6	0.3	23.4	0.1	-11.3	-0.6	-38.4	0.6	13.4	0.1
				Earthquake X Mode 4	-1.1	0.1	-2.4	0.1	-3.9	0.0	-0.8	-0.2	8.9	0.2	-2.5	0.1
				Earthquake X Mode 5	-6.4	-0.5	-0.8	-0.6	-1.3	0.0	-6.2	1.3	2.9	-0.9	-0.9	0.0
				Earthquake X Mode 6	0.8	0.0	1.0	0.0	1.6	0.0	0.7	-0.0	-3.5	0.0	1.0	0.0
				Earthquake X Mode 7	-0.9	-0.0	2.4	-0.0	0.5	0.0	-0.8	-0.0	0.6	0.0	0.3	0.0
				Earthquake X Mode 8	0.5	-0.0	-2.1	-0.0	-0.5	-0.0	0.4	-0.0	-0.5	-0.0	-0.3	-0.0
				Earthquake X Mode 9	-1.3	-0.2	0.3	-0.0	0.1	0.0	-1.3	-0.1	-0.1	0.0	0.1	0.0
				Earthquake Y Mode 1	3.2	0.8	-18.9	0.5	-14.7	0.3	3.5	-0.7	24.3	0.4	-8.4	0.4
				Earthquake Y Mode 2	13.7	-2.7	0.0	-1.9	-0.1	0.1	13.3	3.0	0.7	-2.2	-0.2	0.1
				Earthquake Y Mode 3	-67.7	2.3	188.2	1.7	144.0	0.9	-69.8	-3.5	-236.6	3.6	82.5	0.7
Earthquake Y Mode 4	-0.2	0.0	-0.5	0.0	-0.8	0.0	-0.2	-0.0	1.7	0.0	-0.5	0.0				
Earthquake Y Mode 5	-1.2	-0.1	-0.2	-0.1	-0.2	0.0	-1.1	0.2	0.5	-0.2	-0.2	0.0				
Earthquake Y Mode 6	6.8	0.0	7.8	0.0	12.9	0.0	5.7	-0.2	-29.0	0.1	8.2	0.0				
Earthquake Y Mode 7	-0.3	-0.0	0.7	-0.0	0.2	0.0	-0.2	-0.0	0.2	0.0	0.1	0.0				
Earthquake Y Mode 8	1.3	-0.1	-5.2	-0.0	-1.2	-0.0	1.0	-0.0	-1.2	-0.0	-0.7	-0.0				
Earthquake Y Mode 9	-0.5	-0.1	0.1	-0.0	0.1	0.0	-0.5	-0.1	-0.0	0.0	0.0	0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 1	30.0	0.00/3.00	Self weight	202.7	1.6	6.9	1.7	3.8	0.0	180.9	-3.5	-2.7	2.0	2.5	0.2				
				Dead load	39.7	0.3	2.0	0.3	0.8	0.0	39.4	-0.6	-0.2	0.4	0.5	0.0				
				Live load	44.8	1.1	4.3	1.2	2.4	0.0	44.2	-2.4	-2.4	1.4	1.6	0.1				
				Wind +X ecc.+	-2.8	1.0	0.3	0.5	0.2	0.0	-2.8	-0.6	-0.3	0.6	0.1	0.0				
				Wind +X ecc.-	-0.5	1.0	-5.7	0.5	-3.0	0.0	-0.4	-0.5	3.2	0.5	-2.0	0.0				
				Wind -X ecc.+	2.8	-1.0	-0.3	-0.5	-0.2	-0.0	2.8	0.6	0.3	-0.6	-0.1	-0.0				
				Wind -X ecc.-	0.5	-1.0	5.7	-0.5	3.0	-0.0	0.4	0.5	-3.2	-0.5	2.0	-0.0				
				Wind +Y ecc.+	-13.6	-0.1	38.8	-0.0	20.7	0.2	-13.2	-0.1	-22.1	0.1	13.7	0.2				
				Wind +Y ecc.-	-24.5	0.1	66.6	0.1	35.7	0.1	-23.9	-0.2	-38.3	0.4	23.6	0.1				
				Wind -Y ecc.+	13.6	0.1	-38.8	0.0	-20.7	-0.2	13.2	0.1	22.1	-0.1	-13.7	-0.2				
				Wind -Y ecc.-	24.5	-0.1	-66.6	-0.1	-35.7	-0.1	23.9	0.2	38.3	-0.4	-23.6	-0.1				
				Earthquake X Mode 1	25.5	2.1	-74.6	1.0	-39.1	0.3	24.8	-0.8	40.5	0.6	-25.6	0.5				
				Earthquake X Mode 2	39.2	-10.6	2.0	-5.3	0.5	0.3	38.5	5.1	1.3	-5.4	0.1	0.2				
				Earthquake X Mode 3	-23.0	0.4	52.3	0.2	27.2	0.1	-22.4	-0.3	-27.9	0.5	17.8	0.1				
				Earthquake X Mode 4	2.7	0.3	-13.1	0.1	-7.7	0.0	2.7	-0.2	9.4	0.1	-5.2	0.1				
				Earthquake X Mode 5	-6.3	-1.5	-4.6	-0.9	-2.7	0.0	-6.3	1.1	3.1	-1.0	-1.8	0.0				
				Earthquake X Mode 6	-0.6	0.0	5.1	0.0	3.0	0.0	-0.6	-0.0	-3.7	0.0	2.1	0.0				
				Earthquake X Mode 7	-0.1	0.1	-5.1	0.0	-3.5	0.0	0.0	-0.1	4.9	0.0	-2.5	0.0				
				Earthquake X Mode 8	-0.2	0.1	4.4	0.0	3.0	0.0	-0.3	-0.1	-4.2	0.1	2.1	0.0				
				Earthquake X Mode 9	-0.9	0.5	-0.6	0.3	-0.4	-0.0	-0.9	-0.5	0.6	0.4	-0.3	-0.0				
				Earthquake Y Mode 1	11.6	1.0	-33.8	0.5	-17.7	0.2	11.3	-0.4	18.4	0.3	-11.6	0.2				
				Earthquake Y Mode 2	12.1	-3.3	0.6	-1.6	0.2	0.1	11.9	1.6	0.4	-1.7	0.0	0.1				
				Earthquake Y Mode 3	-141.7	2.5	321.9	1.3	167.4	0.6	-137.6	-2.1	-171.5	2.9	109.6	0.4				
				Earthquake Y Mode 4	0.5	0.0	-2.5	0.0	-1.5	0.0	0.5	-0.0	1.8	0.0	-1.0	0.0				
				Earthquake Y Mode 5	-1.1	-0.3	-0.8	-0.2	-0.5	0.0	-1.1	0.2	0.6	-0.2	-0.3	0.0				
				Earthquake Y Mode 6	-5.0	0.2	42.4	0.1	25.0	0.1	-5.1	-0.2	-30.5	0.3	17.0	0.0				
				Earthquake Y Mode 7	-0.0	0.0	-1.5	0.0	-1.0	0.0	0.0	-0.0	1.5	0.0	-0.7	0.0				
				Earthquake Y Mode 8	-0.4	0.2	11.0	0.1	7.5	0.0	-0.7	-0.2	-10.6	0.2	5.3	0.0				
				Earthquake Y Mode 9	-0.3	0.2	-0.2	0.1	-0.2	-0.0	-0.3	-0.2	0.2	0.2	-0.1	-0.0				
				W6	techo	30.0	12.00/15.00	Self weight	46.1	3.4	-4.5	2.6	-5.2	0.0	24.8	-4.4	10.9	2.9	-1.7	0.0
								Dead load	15.9	1.0	-6.5	0.8	-4.1	0.0	15.2	-1.4	5.9	0.9	-1.5	0.0
								Live load	10.6	1.7	-5.5	1.2	-5.1	0.0	9.8	-1.9	9.6	1.3	-2.9	0.0
Wind +X ecc.+	-0.9	0.3	0.7					0.3	0.6	0.0	-0.8	-0.7	-1.0	0.4	0.4	-0.0				
Wind +X ecc.-	-1.2	0.3	0.4					0.3	0.1	0.0	-1.1	-0.7	0.2	0.4	0.1	0.0				
Wind -X ecc.+	0.9	-0.3	-0.7					-0.3	-0.6	-0.0	0.8	0.7	1.0	-0.4	-0.4	0.0				
Wind -X ecc.-	1.2	-0.3	-0.4					-0.3	-0.1	-0.0	1.1	0.7	-0.2	-0.4	-0.1	-0.0				
Wind +Y ecc.+	2.3	-0.1	0.4					-0.1	2.1	0.1	2.1	0.2	-5.8	-0.1	1.1	0.1				
Wind +Y ecc.-	3.7	-0.1	1.7					-0.1	4.4	0.0	3.5	0.2	-11.2	-0.1	2.6	-0.0				
Wind -Y ecc.+	-2.3	0.1	-0.4					0.1	-2.1	-0.1	-2.1	-0.2	5.8	0.1	-1.1	-0.1				
Wind -Y ecc.-	-3.7	0.1	-1.7					0.1	-4.4	-0.0	-3.5	-0.2	11.2	0.1	-2.6	0.0				
Earthquake X Mode 1	-9.3	0.8	-6.5					0.9	-9.5	0.5	-8.6	-1.9	21.3	1.1	-5.9	0.6				
Earthquake X Mode 2	16.4	-4.3	-14.7					-4.9	-11.6	0.1	14.9	10.4	18.6	-5.6	-8.6	0.4				
Earthquake X Mode 3	4.2	0.0	4.8					0.1	7.0	0.0	3.9	-0.2	-15.6	0.1	4.3	-0.0				
Earthquake X Mode 4	3.7	-0.2	6.7					-0.2	5.9	-0.1	3.4	0.3	-10.6	-0.2	4.0	-0.1				
Earthquake X Mode 5	-6.6	1.4	6.0					1.3	5.2	-0.0	-6.0	-2.5	-9.1	1.5	3.6	-0.1				
Earthquake X Mode 6	-1.1	-0.0	-2.5					-0.0	-2.2	-0.0	-1.0	0.0	4.0	-0.0	-1.5	0.0				
Earthquake X Mode 7	-1.5	0.0	-4.9					0.0	-3.4	0.0	-1.4	-0.0	4.9	0.0	-2.4	0.0				
Earthquake X Mode 8	0.8	0.1	4.0					0.1	2.8	0.0	0.8	-0.1	-4.1	0.1	2.0	-0.0				
Earthquake X Mode 9	-2.9	0.6	0.3					0.4	0.4	-0.0	-2.6	-0.7	-1.0	0.5	0.3	-0.0				
Earthquake Y Mode 1	-4.2	0.4	-3.0					0.4	-4.3	0.2	-3.9	-0.9	9.7	0.5	-2.7	0.3				
Earthquake Y Mode 2	5.1	-1.3	-4.5					-1.5	-3.6	0.0	4.6	3.2	5.7	-1.7	-2.7	0.1				
Earthquake Y Mode 3	26.0	0.3	29.7					0.4	43.1	0.1	24.3	-1.1	-96.1	0.6	26.6	-0.2				
Earthquake Y Mode 4	0.7	-0.0	1.3					-0.0	1.1	-0.0	0.7	0.1	-2.0	-0.0	0.8	-0.0				
Earthquake Y Mode 5	-1.2	0.2	1.1					0.2	0.9	-0.0	-1.1	-0.5	-1.6	0.3	0.7	-0.0				
Earthquake Y Mode 6	-8.7	-0.1	-20.2					-0.1	-18.3	-0.1	-8.0	0.3	32.9	-0.2	-12.1	0.0				
Earthquake Y Mode 7	-0.5	0.0	-1.5					0.0	-1.0	0.0	-0.4	-0.0	1.5	0.0	-0.7	0.0				
Earthquake Y Mode 8	2.1	0.2	10.1					0.2	7.0	0.0	1.9	-0.3	-10.3	0.2	4.9	-0.0				
Earthquake Y Mode 9	-1.1	0.2	0.1					0.2	0.2	-0.0	-1.0	-0.3	-0.3	0.2	0.1	-0.0				
	Floor 4	30.0	9.00/12.00					Self weight	97.0	3.3	-11.7	2.6	-11.0	0.0	76.8	-4.6	20.2	3.2	-3.5	-0.4
								Dead load	33.5	0.8	-4.9	0.6	-4.7	-0.0	32.4	-1.2	8.6	0.7	-1.4	-0.1
								Live load	22.8	1.9	-3.8	1.5	-3.1	0.0	22.8	-2.8	5.4	2.0	-0.1	-0.2
				Wind +X ecc.+	-1.6	0.2	1.2	0.2	1.0	0.0	-1.5	-0.5	-1.5	0.3	0.6	-0.0				
				Wind +X ecc.-	-2.3	0.2	0.3	0.2	-0.1	0.0	-2.0	-0.5	0.8	0.3	-0.1	0.0				
				Wind -X ecc.+	1.6	-0.2	-1.2	-0.2	-1.0	-0.0	1.5	0.5	1.5	-0.3	-0.6	0.0				
				Wind -X ecc.-	2.3	-0.2	-0.3	-0.2	0.1	-0.0	2.0	0.5	-0.8	-0.3	0.1	-0.0				
				Wind +Y ecc.+	5.8	-0.1	5.0	-0.1	6.6	0.2	4.6	0.2	-14.3	-0.1	4.0	0.2				
				Wind +Y ecc.-	8.8	-0.0	9.1	-0.0	11.6	0.1	6.9	-0.0	-24.9	0.0	7.0	0.0				
				Wind -Y ecc.+	-5.8	0.1	-5.0	0.1	-6.6	-0.2	-4.6	-0.2	14.3	0.1	-4.0	-0.2				
				Wind -Y ecc.-	-8.8	0.0	-9.1	0.0	-11.6	-0.1	-6.9	0.0	24.9	-0.0	-7.0	-0.0				
				Earthquake X Mode 1	-17.5	0.6	-14.7	0.5	-16.7	0.6	-14.7	-0.8	34.6	0.5	-10.2	0.7				
				Earthquake X Mode 2	30.4	-3.9	-17.5	-3.6	-12.8	0.4	28.0	7.2	19.3	-4.8	-7.8	1.0				
				Earthquake X Mode 3	9.8	0.1	12.7	0.1	13.7	0.1	7.9	-0.2	-27.5	0.2	8.4	-0.0				
				Earthquake X Mode 4	6.5	-0.1	8.7	-0.1	5.5	-0.1	6.1	0.1	-7.5	-0.0	3.6	-0.1				
				Earthquake X Mode 5	-10.1	1.2	5.0	0.6	3.7	-0.0	-9.6	-0.6	-5.7	0.5	2.0	-0.1				
				Earthquake X Mode 6	-2.0	-0.0	-3.4	-0.0	-2.2	-0.0	-1.9	0.0	3.1	-0.0	-1.4	-0.0				
				Earthquake X Mode 7	-1.9	0.0	-1.4	0.0	0.4	-0.0	-2.2	0.0	-2.4	-0.0	0.2	-0.0				
				Earthquake X Mode 8	1.1	0.0	1.2	-0.0	-0.3	0.0	1.3	0.1	1.9	-0.0	-0.2	0.0				
				Earthquake X Mode 9	-3.3	0.1	-0.7	-0.1	-0.3	0.0	-3.2	0.4	0.1	-0.3	-0.3	0.0				
				Earthquake Y Mode 1	-7.9	0.3	-6.7	0.2	-7.6	0.3	-6.7	-0.4	15.7	0.2	-4.6	0.3				
				Earthquake Y Mode 2	9.4	-1.2	-5.4	-1.1	-4.0	0.1	8.6	2.2	6.0	-1.5	-2.4	0.3				
				Earthquake Y Mode 3	60.1	0.5	78.0	0.5	84.2	0.4	48.3	-1.3	-169.3	0.9	51.5	-0.1				
				Earthquake Y Mode 4	1.3	-0.0	1.7	-0.0	1.1	-0.0	1.2	0.0	-1.4	-0.0	0.7	-0.0				
				Earthquake Y Mode 5	-1.8	0.2	0.9	0.1	0.7	-0.0	-1.7	-0.1	-1.0	0.1	0.4	-0.0				
				Earthquake Y Mode 6	-16.7	-0.1	-28.3	-0.1	-18.2	-0.1	-15.4	0.1	25.2	-0.1	-11.9	-0.0				
				Earthquake Y Mode 7	-0.6	0.0	-0.4	0.0	0.1	-0.0	-0.7	0.0	-0.7	-0.0	0.1	-0.0				
				Earthquake Y Mode 8	2.8	0.0	3.0	-0.0	-0.7	0.0	3.4	0.2	4.8	-0.1	-0.4	0.0				
				Earthquake Y Mode 9	-1.2	0.0	-0.3	-0.0	-0.1	0.0	-1.2	0.1	0.0	-0.1	-0.1	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 3	30.0	6.00/9.00	Self weight	143.9	2.9	-7.6	2.3	-6.3	0.0	123.0	-4.1	11.0	2.8	0.2	-0.4				
				Dead load	45.4	0.5	-3.5	0.4	-3.5	-0.0	44.7	-0.7	6.6	0.5	-0.6	-0.1				
				Live load	34.8	1.7	-3.2	1.3	-2.7	0.0	34.7	-2.4	4.7	1.6	0.2	-0.2				
				Wind +X ecc.+	-3.6	0.4	1.8	0.4	1.4	0.0	-3.3	-0.7	-2.4	0.5	0.9	-0.0				
				Wind +X ecc.-	-4.8	0.4	-0.0	0.3	-0.4	0.0	-4.4	-0.7	1.1	0.5	-0.3	-0.0				
				Wind -X ecc.+	3.6	-0.4	-1.8	-0.4	-1.4	-0.0	3.3	0.7	2.4	-0.5	-0.9	0.0				
				Wind -X ecc.-	4.8	-0.4	0.0	-0.3	0.4	-0.0	4.4	0.7	-1.1	-0.5	0.3	0.0				
				Wind +Y ecc.+	12.0	-0.1	10.5	-0.1	10.6	0.2	10.3	0.2	-20.7	-0.1	6.6	0.2				
				Wind +Y ecc.-	17.5	-0.0	18.8	-0.0	18.9	0.1	14.9	-0.0	-36.8	0.0	11.7	0.0				
				Wind -Y ecc.+	-12.0	0.1	-10.5	0.1	-10.6	-0.2	-10.3	-0.2	20.7	0.1	-6.6	-0.2				
				Wind -Y ecc.-	-17.5	0.0	-18.8	0.0	-18.9	-0.1	-14.9	0.0	36.8	-0.0	-11.7	-0.0				
				Earthquake X Mode 1	-30.9	0.9	-26.6	0.7	-24.8	0.6	-27.3	-1.3	46.6	0.8	-15.6	0.8				
				Earthquake X Mode 2	60.1	-5.9	-21.5	-4.9	-17.4	0.4	56.3	9.5	28.2	-6.9	-10.0	1.3				
				Earthquake X Mode 3	18.0	0.2	21.5	0.1	19.5	0.1	15.7	-0.3	-35.9	0.2	12.2	-0.0				
				Earthquake X Mode 4	8.0	-0.1	5.3	-0.0	1.3	-0.0	8.3	-0.0	1.2	-0.0	1.0	-0.0				
				Earthquake X Mode 5	-11.4	0.8	1.4	0.2	0.5	-0.0	-10.9	0.3	-0.3	-0.1	0.1	0.0				
				Earthquake X Mode 6	-2.6	-0.0	-2.1	0.0	-0.5	-0.0	-2.7	-0.0	-0.4	0.0	-0.4	-0.0				
				Earthquake X Mode 7	-0.9	-0.0	4.2	-0.0	3.4	-0.0	-1.3	0.0	-5.7	-0.0	2.3	-0.0				
				Earthquake X Mode 8	0.5	-0.1	-3.7	-0.0	-3.0	-0.0	0.8	0.1	5.0	-0.1	-2.0	0.0				
				Earthquake X Mode 9	-1.5	-0.4	-0.4	-0.3	-0.3	0.0	-1.6	0.5	0.5	-0.4	-0.2	0.1				
				Earthquake Y Mode 1	-14.0	0.4	-12.1	0.3	-11.3	0.3	-12.4	-0.6	21.2	0.4	-7.1	0.4				
				Earthquake Y Mode 2	18.6	-1.8	-6.6	-1.5	-5.4	0.1	17.4	2.9	8.7	-2.1	-3.1	0.4				
				Earthquake Y Mode 3	110.6	1.0	132.4	0.8	120.2	0.6	96.4	-1.8	-221.2	1.4	75.0	-0.1				
				Earthquake Y Mode 4	1.5	-0.0	1.0	-0.0	0.3	-0.0	1.6	-0.0	0.2	-0.0	0.2	-0.0				
				Earthquake Y Mode 5	-2.1	0.1	0.2	0.0	0.1	-0.0	-2.0	0.1	-0.0	-0.0	0.0	0.0				
				Earthquake Y Mode 6	-21.2	-0.1	-17.0	0.0	-4.3	-0.0	-22.1	-0.1	-3.7	0.0	-3.3	-0.0				
				Earthquake Y Mode 7	-0.3	-0.0	1.3	-0.0	1.0	-0.0	-0.4	0.0	-1.7	-0.0	0.7	-0.0				
				Earthquake Y Mode 8	1.1	-0.2	-9.3	-0.1	-7.5	-0.0	2.0	0.2	12.5	-0.2	-5.0	0.0				
				Earthquake Y Mode 9	-0.5	-0.1	-0.1	-0.1	-0.1	0.0	-0.6	0.2	0.2	-0.1	-0.1	0.0				
					Floor 2	30.0	3.00/6.00	Self weight	186.8	2.6	-0.5	2.0	-1.4	0.1	165.6	-3.5	4.0	2.4	3.8	-0.3
								Dead load	53.7	0.4	-1.0	0.3	-1.7	0.0	53.1	-0.6	4.0	0.3	0.5	-0.1
								Live load	44.8	1.6	0.8	1.2	0.2	0.1	44.6	-2.2	0.5	1.5	2.2	-0.2
								Wind +X ecc.+	-6.7	0.6	2.1	0.4	1.7	0.0	-6.4	-0.7	-2.9	0.5	0.9	-0.0
								Wind +X ecc.-	-8.7	0.5	-1.0	0.4	-0.8	0.0	-8.1	-0.7	1.4	0.5	-0.6	0.0
								Wind -X ecc.+	6.7	-0.6	-2.1	-0.4	-1.7	-0.0	6.4	0.7	2.9	-0.5	-0.9	0.0
								Wind -X ecc.-	8.7	-0.5	1.0	-0.4	0.8	-0.0	8.1	0.7	-1.4	-0.5	0.6	-0.0
Wind +Y ecc.+	20.8	-0.1	18.3					-0.1	14.9	0.2	18.9	0.1	-25.6	-0.1	9.6	0.2				
Wind +Y ecc.-	29.9	0.0	32.2					0.0	26.5	0.1	26.9	-0.1	-45.7	0.1	16.9	0.0				
Wind -Y ecc.+	-20.8	0.1	-18.3					0.1	-14.9	-0.2	-18.9	-0.1	25.6	0.1	-9.6	-0.2				
Wind -Y ecc.-	-29.9	-0.0	-32.2					-0.0	-26.5	-0.1	-26.9	0.1	45.7	-0.1	-16.9	-0.0				
Earthquake X Mode 1	-49.0	1.0	-39.9					0.7	-31.0	0.6	-45.2	-1.0	51.4	0.7	-20.2	0.8				
Earthquake X Mode 2	101.9	-7.2	-20.9					-4.9	-18.4	0.4	96.7	8.0	31.6	-6.2	-9.4	1.1				
Earthquake X Mode 3	28.2	0.2	31.0					0.2	23.8	0.1	25.9	-0.3	-39.2	0.2	15.3	-0.0				
Earthquake X Mode 4	7.0	0.0	-2.7					0.0	-4.3	0.0	7.7	-0.1	9.7	0.1	-2.6	0.1				
Earthquake X Mode 5	-8.1	-0.3	-3.5					-0.4	-3.4	0.0	-8.0	1.2	6.1	-0.9	-2.2	0.1				
Earthquake X Mode 6	-2.3	0.0	1.1					0.0	1.8	0.0	-2.6	-0.0	-3.9	0.0	1.1	-0.0				
Earthquake X Mode 7	-0.0	-0.0	2.4					-0.0	0.6	0.0	0.1	-0.0	0.6	0.0	0.4	-0.0				
Earthquake X Mode 8	-0.1	-0.0	-2.1					-0.0	-0.5	-0.0	-0.2	-0.0	-0.4	0.0	-0.4	-0.0				
Earthquake X Mode 9	-0.1	-0.2	0.4					-0.0	-0.0	0.0	-0.2	-0.2	0.4	0.1	0.1	-0.0				
Earthquake Y Mode 1	-22.2	0.5	-18.1					0.3	-14.0	0.3	-20.5	-0.5	23.3	0.3	-9.1	0.4				
Earthquake Y Mode 2	31.5	-2.2	-6.4					-1.5	-5.7	0.1	29.9	2.5	9.8	-1.9	-2.9	0.4				
Earthquake Y Mode 3	173.8	1.5	190.9					1.0	146.7	0.7	159.7	-1.8	-241.0	1.5	94.0	-0.0				
Earthquake Y Mode 4	1.3	0.0	-0.5					0.0	-0.8	0.0	1.5	-0.0	1.9	0.0	-0.5	0.0				
Earthquake Y Mode 5	-1.5	-0.0	-0.6					-0.1	-0.6	0.0	-1.5	0.2	1.1	-0.2	-0.4	0.0				
Earthquake Y Mode 6	-18.6	0.1	9.4					0.1	14.5	0.1	-21.1	-0.3	-32.4	0.2	8.9	-0.0				
Earthquake Y Mode 7	-0.0	-0.0	0.7					-0.0	0.2	0.0	0.0	-0.0	0.2	0.0	0.1	-0.0				
Earthquake Y Mode 8	-0.2	-0.1	-5.2					-0.0	-1.3	-0.0	-0.5	-0.1	-1.0	0.0	-0.9	-0.0				
Earthquake Y Mode 9	-0.0	-0.1	0.1					-0.0	-0.0	0.0	-0.1	-0.1	0.2	0.0	0.0	-0.0				
	Floor 1	30.0	0.00/3.00					Self weight	220.9	1.1	5.3	1.1	2.1	0.1	200.1	-2.1	-0.4	1.2	6.2	-0.2
								Dead load	57.4	0.1	0.9	0.1	-0.3	0.0	57.1	-0.2	1.8	0.1	1.3	-0.0
								Live load	49.8	0.7	3.8	0.7	1.9	0.1	50.0	-1.4	-1.5	0.8	3.2	-0.1
								Wind +X ecc.+	-10.2	1.0	1.4	0.5	1.3	0.0	-9.8	-0.4	-2.4	0.5	0.6	-0.0
								Wind +X ecc.-	-13.2	0.9	-4.8	0.4	-2.1	0.0	-12.7	-0.4	1.3	0.4	-1.8	0.0
								Wind -X ecc.+	10.2	-1.0	-1.4	-0.5	-1.3	-0.0	9.8	0.4	2.4	-0.5	-0.6	0.0
								Wind -X ecc.-	13.2	-0.9	4.8	-0.4	2.1	-0.0	12.7	0.4	-1.3	-0.4	1.8	-0.0
				Wind +Y ecc.+	31.5	-0.2	38.8	-0.1	20.6	0.2	30.3	0.0	-21.5	-0.1	14.7	0.1				
				Wind +Y ecc.-	45.2	0.2	67.5	0.1	36.4	0.1	43.5	-0.1	-39.0	0.2	25.7	-0.0				
				Wind -Y ecc.+	-31.5	0.2	-38.8	0.1	-20.6	-0.2	-30.3	-0.0	21.5	0.1	-14.7	-0.1				
				Wind -Y ecc.-	-45.2	-0.2	-67.5	-0.1	-36.4	-0.1	-43.5	0.1	39.0	-0.2	-25.7	0.0				
				Earthquake X Mode 1	-69.3	1.3	-74.5	0.6	-38.7	0.4	-67.2	-0.4	38.9	0.4	-27.8	0.6				
				Earthquake X Mode 2	143.7	-10.6	-9.9	-4.8	-12.3	0.2	138.5	3.7	25.4	-4.7	-4.3	0.6				
				Earthquake X Mode 3	39.7	0.4	53.2	0.2	27.9	0.1	38.6	-0.2	-28.6	0.2	19.7	-0.0				
				Earthquake X Mode 4	3.8	0.1	-13.4	0.1	-8.0	0.0	4.4	-0.1	10.0	0.1	-5.5	0.1				
				Earthquake X Mode 5	-2.7	-1.5	-6.5	-0.8	-4.7	0.0	-3.1	0.9	7.1	-1.0	-3.0	0.1				
				Earthquake X Mode 6	-1.2	0.0	5.3	0.0	3.2	0.0	-1.4	-0.0	-4.0	0.0	2.2	-0.0				
				Earthquake X Mode 7	-0.8	0.0	-5.2	0.0	-3.6	0.0	-0.4	-0.0	5.1	0.0	-2.5	0.0				
				Earthquake X Mode 8	0.4	0.1	4.5	0.1	3.2	0.0	0.1	-0.1	-4.5	0.1	2.2	-0.0				
				Earthquake X Mode 9	-1.1	0.5	-0.3	0.3	-0.1	-0.0	-1.0	-0.5	-0.1	0.5	-0.1	-0.0				
				Earthquake Y Mode 1	-31.5	0.6	-33.8	0.3	-17.6	0.2	-30.5	-0.2	17.7	0.2	-12.6	0.3				
				Earthquake Y Mode 2	44.4	-3.3	-3.0	-1.5	-3.8	0.1	42.8	1.1	7.8	-1.4	-1.3	0.2				
				Earthquake Y Mode 3	244.1	2.7	327.3	1.2	171.7	0.5	237.8	-1.2	-175.8	1.5	121.2	-0.1				
				Earthquake Y Mode 4	0.7	0.0	-2.6	0.0	-1.5	0.0	0.8	-0.0	1.9	0.0	-1.1	0.0				
				Earthquake Y Mode 5	-0.5	-0.3	-1.2	-0.1	-0.9	0.0	-0.6	0.2	1.3	-0.2	-0.5	0.0				
				Earthquake Y Mode 6	-9.8	0.3	43.8	0.2	26.5	0.1	-11.5	-0.3	-33.2	0.3	18.0	-0.0				
				Earthquake Y Mode 7	-0.2	0.0	-1.6	0.0	-1.1	0.0	-0.1	-0.0	1.5	0.0	-0.8	0.0				
				Earthquake Y Mode 8	1.0	0.2	11.4	0.1	7.9	0.0	0.3	-0.2	-11.3	0.2	5.6	-0.0				
				Earthquake Y Mode 9	-0.4	0.2	-0.1	0.1	-0.0	-0.0	-0.4	-0.2	-0.0	0.2	-0.0	-0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
W39	techo	30.0	12.00/15.00	Self weight	44.3	-6.0	-0.1	-5.6	-0.2	-0.1	22.6	9.8	0.5	-2.7	-0.3	-0.1
				Dead load	22.2	-1.7	0.2	-0.9	0.4	-0.0	20.5	0.9	-1.4	-0.4	1.0	-0.2
				Live load	5.0	-3.5	-0.0	-3.4	-0.1	-0.0	4.6	5.9	0.1	-1.7	-0.1	-0.1
				Wind +X ecc.+	-0.6	2.6	0.1	3.5	0.1	-0.0	-0.5	-7.2	-0.2	1.4	0.2	-0.0
				Wind +X ecc.-	-0.6	2.6	0.0	3.6	0.0	0.0	-0.5	-7.3	-0.1	1.4	0.1	0.0
				Wind -X ecc.+	0.6	-2.6	-0.1	-3.5	-0.1	0.0	0.5	7.2	0.2	-1.4	-0.2	0.0
				Wind -X ecc.-	0.6	-2.6	-0.0	-3.6	-0.0	-0.0	0.5	7.3	0.1	-1.4	-0.1	-0.0
				Wind +Y ecc.+	0.9	-0.2	1.2	-0.2	1.0	0.1	0.7	0.3	-1.8	-0.1	1.2	0.2
				Wind +Y ecc.-	0.9	-0.2	1.6	-0.3	1.4	0.1	0.7	0.7	-2.4	-0.2	1.7	0.1
				Wind -Y ecc.+	-0.9	0.2	-1.2	0.2	-1.0	-0.1	-0.7	-0.3	1.8	0.1	-1.2	-0.2
				Wind -Y ecc.-	-0.9	0.2	-1.6	0.3	-1.4	-0.1	-0.7	-0.7	2.4	0.2	-1.7	-0.1
				Earthquake X Mode 1	-2.2	10.4	-0.9	13.6	-0.8	0.5	-1.7	-27.7	1.3	5.7	-0.7	0.5
				Earthquake X Mode 2	13.3	-44.5	-0.7	-53.6	-0.5	0.4	10.9	105.4	1.1	-22.7	-1.4	0.6
				Earthquake X Mode 3	0.5	1.3	2.0	1.5	1.6	0.1	0.4	-2.8	-2.9	0.6	2.0	0.1
				Earthquake X Mode 4	1.4	-4.6	0.6	-4.1	0.5	-0.1	1.2	6.9	-0.8	-2.1	0.6	-0.1
				Earthquake X Mode 5	-6.1	19.8	0.4	17.2	0.3	-0.1	-5.3	-28.6	-0.6	8.7	0.6	-0.1
				Earthquake X Mode 6	0.1	-0.4	-0.4	-0.4	-0.3	-0.0	0.1	0.6	0.5	-0.2	-0.4	-0.0
				Earthquake X Mode 7	-0.4	1.8	-0.3	1.2	-0.2	0.0	-0.3	-1.6	0.4	0.7	-0.3	0.0
				Earthquake X Mode 8	-0.4	1.7	0.3	1.1	0.3	0.0	-0.4	-1.6	-0.4	0.7	0.3	0.0
				Earthquake X Mode 9	-2.1	8.9	-0.1	6.0	-0.0	-0.0	-1.9	-7.9	0.0	3.5	0.0	-0.0
				Earthquake Y Mode 1	-1.0	4.7	-0.4	6.2	-0.4	0.2	-0.8	-12.6	0.6	2.6	-0.3	0.2
				Earthquake Y Mode 2	4.1	-13.7	-0.2	-16.6	-0.1	0.1	3.4	32.6	0.3	-7.0	-0.4	0.2
				Earthquake Y Mode 3	3.0	8.0	12.3	9.1	10.0	0.3	2.5	-17.5	-17.8	3.6	12.5	0.5
				Earthquake Y Mode 4	0.3	-0.9	0.1	-0.8	0.1	-0.0	0.2	1.3	-0.2	-0.4	0.1	-0.0
				Earthquake Y Mode 5	-1.1	3.6	0.1	3.1	0.1	-0.0	-1.0	-5.2	-0.1	1.6	0.1	-0.0
				Earthquake Y Mode 6	0.5	-3.5	-3.1	-2.9	-2.4	-0.1	0.5	4.8	4.3	-1.5	-3.0	-0.1
				Earthquake Y Mode 7	-0.1	0.5	-0.1	0.4	-0.1	0.0	-0.1	-0.5	0.1	0.2	-0.1	0.0
				Earthquake Y Mode 8	-1.1	4.2	0.9	2.9	0.6	0.0	-1.0	-3.9	-1.1	1.6	0.8	0.0
				Earthquake Y Mode 9	-0.8	3.3	-0.0	2.2	-0.0	-0.0	-0.7	-2.9	0.0	1.3	0.0	-0.0
	Floor 4	30.0	9.00/12.00	Self weight	94.9	-4.3	-0.3	-3.5	-0.2	-0.1	72.7	6.5	0.6	-1.6	-0.6	-0.3
				Dead load	45.5	-2.4	-0.5	-2.4	-0.4	-0.0	43.5	4.6	1.0	-1.3	-0.9	-0.2
				Live load	19.5	-2.1	0.1	-1.5	0.1	-0.0	18.6	2.5	-0.1	-0.6	0.0	-0.1
				Wind +X ecc.+	-1.3	4.9	0.1	5.5	0.1	-0.0	-1.7	-11.1	-0.2	2.9	0.1	-0.0
				Wind +X ecc.-	-1.3	4.9	0.0	5.5	-0.0	0.0	-1.7	-11.3	0.0	3.0	-0.1	0.0
				Wind -X ecc.+	1.3	-4.9	-0.1	-5.5	-0.1	0.0	1.7	11.1	0.2	-2.9	-0.1	0.0
				Wind -X ecc.-	1.3	-4.9	-0.0	-5.5	0.0	-0.0	1.7	11.3	-0.0	-3.0	0.1	-0.0
				Wind +Y ecc.+	1.3	0.3	1.7	0.3	1.4	0.2	1.2	-0.5	-2.6	0.1	2.1	0.4
				Wind +Y ecc.-	1.3	0.2	2.4	0.1	1.9	0.1	1.3	0.2	-3.6	-0.1	2.9	0.3
				Wind -Y ecc.+	-1.3	-0.3	-1.7	-0.3	-1.4	-0.2	-1.2	0.5	2.6	-0.1	-2.1	-0.4
				Wind -Y ecc.-	-1.3	-0.2	-2.4	-0.1	-1.9	-0.1	-1.3	-0.2	3.6	0.1	-2.9	-0.3
				Earthquake X Mode 1	-4.9	19.4	-1.4	20.4	-1.1	0.6	-6.3	-40.5	2.3	11.4	-1.9	0.5
				Earthquake X Mode 2	24.8	-73.8	-0.3	-73.9	-0.2	0.7	29.4	143.4	0.1	-40.2	0.2	0.8
				Earthquake X Mode 3	0.5	2.6	2.6	2.5	2.1	0.1	0.3	-4.5	-4.0	1.2	3.2	0.3
				Earthquake X Mode 4	2.5	-5.9	0.6	-3.5	0.4	-0.1	2.6	4.5	-0.7	-2.2	0.6	-0.0
				Earthquake X Mode 5	-10.7	23.1	0.3	13.4	0.2	-0.1	-11.1	-16.9	-0.4	8.0	0.3	-0.1
				Earthquake X Mode 6	0.2	-0.5	-0.3	-0.3	-0.2	-0.0	0.2	0.4	0.4	-0.1	-0.4	-0.0
				Earthquake X Mode 7	-0.4	0.6	-0.0	-0.2	0.0	-0.0	-0.4	1.0	-0.1	-0.1	0.0	-0.0
				Earthquake X Mode 8	-0.5	0.3	0.0	-0.2	-0.0	-0.0	-0.5	0.9	0.1	-0.2	-0.0	0.0
				Earthquake X Mode 9	-2.4	2.1	-0.0	-1.2	-0.0	0.0	-2.3	5.0	-0.0	-0.9	-0.0	0.0
				Earthquake Y Mode 1	-2.2	8.8	-0.6	9.3	-0.5	0.3	-2.8	-18.4	1.0	5.2	-0.9	0.2
				Earthquake Y Mode 2	7.7	-22.8	-0.1	-22.8	-0.1	0.2	9.1	44.3	0.0	-12.4	0.1	0.3
				Earthquake Y Mode 3	3.2	16.2	16.2	15.2	12.7	0.5	2.0	-27.7	-24.3	7.1	19.6	1.8
				Earthquake Y Mode 4	0.5	-1.1	0.1	-0.7	0.1	-0.0	0.5	0.9	-0.1	-0.4	0.1	-0.0
				Earthquake Y Mode 5	-1.9	4.2	0.1	2.4	0.0	-0.0	-2.0	-3.1	-0.1	1.4	0.0	-0.0
				Earthquake Y Mode 6	1.6	-3.8	-2.8	-2.3	-2.0	-0.1	1.7	3.0	3.7	-1.1	-3.1	-0.4
				Earthquake Y Mode 7	-0.1	0.2	-0.0	-0.1	0.0	-0.0	-0.1	0.3	-0.0	-0.0	0.0	-0.0
				Earthquake Y Mode 8	-1.3	0.9	0.0	-0.5	-0.1	-0.0	-1.3	2.2	0.2	-0.4	-0.1	0.0
				Earthquake Y Mode 9	-0.9	0.8	-0.0	-0.4	-0.0	0.0	-0.8	1.8	-0.0	-0.3	-0.0	0.0
	Floor 3	30.0	6.00/9.00	Self weight	144.3	-3.0	-0.2	-2.6	-0.1	-0.1	121.0	5.2	0.3	-1.0	-0.4	-0.2
				Dead load	67.6	-1.0	-0.5	-0.7	-0.4	-0.1	65.0	1.3	0.8	-0.2	-0.8	-0.2
				Live load	33.8	-1.7	0.1	-1.4	0.1	-0.0	32.5	2.7	-0.1	-0.6	0.0	-0.1
				Wind +X ecc.+	-3.6	8.6	0.2	8.0	0.1	-0.0	-4.1	-14.9	-0.2	4.5	0.1	-0.0
				Wind +X ecc.-	-3.7	8.7	-0.0	8.1	-0.0	0.0	-4.1	-15.1	0.1	4.5	-0.1	0.0
				Wind -X ecc.+	3.6	-8.6	-0.2	-8.0	-0.1	0.0	4.1	14.9	0.2	-4.5	-0.1	0.0
				Wind -X ecc.-	3.7	-8.7	0.0	-8.1	0.0	-0.0	4.1	15.1	-0.1	-4.5	0.1	-0.0
				Wind +Y ecc.+	1.4	0.8	2.4	0.7	1.8	0.2	1.3	-1.0	-3.5	0.2	2.8	0.5
				Wind +Y ecc.-	1.5	0.5	3.3	0.3	2.6	0.1	1.5	-0.2	-4.9	-0.1	4.0	0.4
				Wind -Y ecc.+	-1.4	-0.8	-2.4	-0.7	-1.8	-0.2	-1.3	1.0	3.5	-0.2	-2.8	-0.5
				Wind -Y ecc.-	-1.5	-0.5	-3.3	-0.3	-2.6	-0.1	-1.5	0.2	4.9	0.1	-4.0	-0.4
				Earthquake X Mode 1	-12.9	31.4	-2.1	27.5	-1.6	0.7	-14.3	-49.6	3.2	15.9	-2.7	0.6
				Earthquake X Mode 2	54.5	-112.8	-0.0	-96.7	-0.0	0.8	59.1	172.2	-0.2	-54.4	0.5	1.0
				Earthquake X Mode 3	-0.3	4.1	3.4	3.4	2.6	0.1	-0.5	-5.7	-4.9	1.6	4.0	0.4
				Earthquake X Mode 4	2.8	-3.5	0.2	-0.7	0.1	-0.0	2.7	-1.1	-0.2	-0.5	0.2	0.0
				Earthquake X Mode 5	-12.2	12.4	0.1	2.1	0.1	-0.0	-11.9	5.1	-0.1	1.1	0.1	-0.0
				Earthquake X Mode 6	0.3	-0.2	-0.1	-0.0	-0.1	-0.0	0.3	-0.1	0.1	0.0	-0.1	-0.0
				Earthquake X Mode 7	-0.1	-1.5	0.3	-1.2	0.2	-0.0	-0.0	1.8	-0.4	-0.8	0.3	-0.0
				Earthquake X Mode 8	-0.1	-1.4	0.3	-1.1	-0.2	-0.0	-0.0	1.7	0.4	-0.7	-0.4	-0.0
				Earthquake X Mode 9	-0.4	-7.6	0.1	-5.8	0.0	0.0	-0.2	9.1	-0.1	-3.9	0.1	0.0
				Earthquake Y Mode 1	-5.9	14.3	-0.9	12.5	-0.7	0.3	-6.5	-22.5	1.4	7.2	-1.2	0.3
				Earthquake Y Mode 2	16.8	-34.8	-0.0	-29.9	-0.0	0.2	18.3	53.2	-0.1	-16.8	0.2	0.3
				Earthquake Y Mode 3	-2.0	25.1	20.7	20.6	16.0	0.5	-3.2	-35.0	-30.3	10.1	24.4	2.2
Earthquake Y Mode 4	0.5	-0.7	0.0	-0.1	0.0	-0.0	0.5	-0.2	-0.0	-0.1	0.0	0.0				
Earthquake Y Mode 5	-2.2	2.3	0.0	0.4	0.0	-0.0	-2.2	0.9	-0.0	0.2	0.0	-0.0				
Earthquake Y Mode 6	2.1	-1.6	-1.0	-0.2	-0.6	-0.0	2.1	-0.8	0.9	0.1	-0.9	-0.2				
Earthquake Y Mode 7	-0.0	-0.5	0.1	-0.3	0.1	-0.0	-0.0	0.6	-0.1	-0.2	0.1	-0.0				
Earthquake Y Mode 8	-0.2	-3.6	-0.8	-2.7	-0.6	-0.0	-0.1	4.3	1.1	-1.8	-0.9	-0.1				
Earthquake Y Mode 9	-0.2	-2.8	0.0	-2.1	0.0	0.0	-0.1	3.3	-0.0	-1.4	0.0	0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 2	30.0	3.00/6.00	Self weight	193.2	-0.3	0.0	-0.9	0.0	-0.1	168.8	2.9	0.0	0.1	-0.1	-0.2				
				Dead load	90.6	-0.5	-0.6	-0.6	-0.4	-0.1	87.6	1.3	0.9	-0.2	-0.9	-0.2				
				Live load	47.7	-0.3	0.2	-0.5	0.2	-0.0	46.2	1.3	-0.3	0.0	0.2	-0.1				
				Wind +X ecc.+	-7.5	13.1	0.2	9.9	0.1	-0.0	-7.8	-16.1	-0.2	5.8	0.1	-0.0				
				Wind +X ecc.-	-7.5	13.3	-0.1	10.0	-0.1	0.0	-7.9	-16.2	0.2	5.9	-0.2	0.0				
				Wind -X ecc.+	7.5	-13.1	-0.2	-9.9	-0.1	0.0	7.8	16.1	0.2	-5.8	-0.1	0.0				
				Wind -X ecc.-	7.5	-13.3	0.1	-10.0	0.1	-0.0	7.9	16.2	-0.2	-5.9	0.2	-0.0				
				Wind +Y ecc.+	0.9	1.4	2.9	1.0	2.2	0.2	0.8	-1.5	-4.1	0.4	3.3	0.5				
				Wind +Y ecc.-	1.1	0.8	4.1	0.6	3.1	0.1	1.1	-0.7	-5.8	0.0	4.8	0.4				
				Wind -Y ecc.+	-0.9	-1.4	-2.9	-1.0	-2.2	-0.2	-0.8	1.5	4.1	-0.4	-3.3	-0.5				
				Wind -Y ecc.-	-1.1	-0.8	-4.1	-0.6	-3.1	-0.1	-1.1	0.7	5.8	-0.0	-4.8	-0.4				
				Earthquake X Mode 1	-24.6	43.0	-2.7	30.7	-2.0	0.7	-25.7	-48.0	3.7	18.3	-3.2	0.6				
				Earthquake X Mode 2	96.4	-149.9	0.2	-106.3	0.1	0.7	99.8	165.3	-0.3	-61.9	0.7	0.9				
				Earthquake X Mode 3	-2.0	5.4	3.7	3.8	2.8	0.1	-2.1	-5.8	-5.2	1.9	4.2	0.4				
				Earthquake X Mode 4	1.9	1.8	-0.3	2.7	-0.3	0.0	1.7	-5.8	0.5	1.7	-0.4	0.1				
				Earthquake X Mode 5	-8.0	-8.3	-0.2	-11.3	-0.1	0.0	-7.3	23.7	0.2	-7.2	-0.2	0.1				
				Earthquake X Mode 6	0.1	0.2	0.2	0.3	0.2	0.0	0.1	-0.5	-0.3	0.2	0.2	0.0				
				Earthquake X Mode 7	0.1	-0.8	0.1	-0.1	0.0	-0.0	0.1	-0.4	-0.0	-0.1	0.1	0.0				
				Earthquake X Mode 8	0.2	-0.6	-0.1	-0.1	-0.0	-0.0	0.2	-0.3	0.0	-0.0	-0.1	-0.0				
				Earthquake X Mode 9	0.8	-3.8	0.0	-0.4	0.0	0.0	0.7	-2.1	-0.0	-0.2	0.0	0.0				
				Earthquake Y Mode 1	-11.2	19.5	-1.2	13.9	-0.9	0.3	-11.6	-21.8	1.7	8.3	-1.5	0.3				
				Earthquake Y Mode 2	29.8	-46.3	0.1	-32.8	0.0	0.2	30.8	51.1	-0.1	-19.1	0.2	0.3				
				Earthquake Y Mode 3	-12.1	33.3	23.0	23.6	17.2	0.5	-13.1	-35.8	-31.9	11.9	26.2	2.4				
				Earthquake Y Mode 4	0.4	0.3	-0.1	0.5	-0.0	0.0	0.3	-1.1	0.1	0.3	-0.1	0.0				
				Earthquake Y Mode 5	-1.5	-1.5	-0.0	-2.0	-0.0	0.0	-1.3	4.3	0.0	-1.3	-0.0	0.0				
				Earthquake Y Mode 6	1.0	2.0	1.5	2.2	1.2	0.0	0.9	-4.1	-2.5	1.4	1.9	0.1				
				Earthquake Y Mode 7	0.0	-0.3	0.0	-0.0	0.0	-0.0	0.0	-0.1	-0.0	0.0	0.0	0.0				
				Earthquake Y Mode 8	0.5	-1.6	-0.2	-0.2	-0.1	-0.0	0.5	-0.8	0.1	-0.1	-0.1	-0.0				
				Earthquake Y Mode 9	0.3	-1.4	0.0	-0.2	0.0	0.0	0.3	-0.8	-0.0	-0.1	0.0	0.0				
					Floor 1	30.0	0.00/3.00	Self weight	240.6	1.3	0.2	0.3	0.1	-0.0	215.2	0.9	0.0	0.8	-0.0	-0.1
								Dead load	115.5	0.1	-0.2	-0.1	-0.3	-0.0	111.8	0.8	0.8	0.1	-0.7	-0.2
								Live load	61.0	0.5	0.2	0.2	0.2	-0.0	59.2	0.3	-0.2	0.4	0.1	-0.1
								Wind +X ecc.+	-12.0	21.9	0.1	10.8	0.1	-0.0	-12.1	-10.3	-0.1	7.2	0.1	-0.0
								Wind +X ecc.-	-12.0	22.2	-0.2	11.0	-0.1	0.0	-12.1	-10.4	0.2	7.4	-0.2	0.0
								Wind -X ecc.+	12.0	-21.9	-0.1	-10.8	-0.1	0.0	12.1	10.3	0.1	-7.2	-0.1	0.0
								Wind -X ecc.-	12.0	-22.2	0.2	-11.0	0.1	-0.0	12.1	10.4	-0.2	-7.4	0.2	-0.0
Wind +Y ecc.+	-0.1	1.4	2.7					0.9	1.8	0.1	-0.1	-1.2	-3.1	0.3	2.7	0.4				
Wind +Y ecc.-	0.0	-0.3	4.0					0.2	2.7	0.0	0.0	-0.7	-4.6	-0.3	4.0	0.4				
Wind -Y ecc.+	0.1	-1.4	-2.7					-0.9	-1.8	-0.1	0.1	1.2	3.1	-0.3	-2.7	-0.4				
Wind -Y ecc.-	-0.0	0.3	-4.0					-0.2	-2.7	-0.0	-0.0	0.7	4.6	0.3	-4.0	-0.4				
Earthquake X Mode 1	-36.7	63.3	-2.9					29.9	-1.9	0.5	-36.7	-26.1	3.1	20.3	-2.9	0.3				
Earthquake X Mode 2	140.3	-212.9	0.7					-101.3	0.2	0.4	140.1	89.8	-0.1	-66.9	0.7	0.6				
Earthquake X Mode 3	-4.2	6.5	3.2					3.3	2.2	0.0	-4.2	-3.4	-3.6	1.9	3.2	0.3				
Earthquake X Mode 4	0.3	7.8	-0.6					4.3	-0.4	0.1	0.1	-4.9	0.7	3.0	-0.6	0.0				
Earthquake X Mode 5	-0.8	-30.6	-0.2					-17.2	-0.2	0.1	-0.3	19.8	0.3	-11.7	-0.2	0.0				
Earthquake X Mode 6	-0.1	0.6	0.3					0.3	0.2	0.0	-0.2	-0.4	-0.4	0.2	0.3	0.0				
Earthquake X Mode 7	-0.1	1.9	-0.2					1.3	-0.2	0.0	-0.1	-1.7	0.3	0.9	-0.3	0.0				
Earthquake X Mode 8	-0.1	1.6	0.3					1.1	0.2	0.0	-0.2	-1.5	-0.3	0.8	0.3	0.0				
Earthquake X Mode 9	-0.6	9.2	-0.1					6.1	-0.0	-0.0	-0.8	-8.3	0.1	4.4	-0.1	-0.0				
Earthquake Y Mode 1	-16.6	28.7	-1.3					13.6	-0.9	0.2	-16.7	-11.8	1.4	9.2	-1.3	0.1				
Earthquake Y Mode 2	43.3	-65.8	0.2					-31.3	0.1	0.1	43.3	27.7	-0.0	-20.7	0.2	0.2				
Earthquake Y Mode 3	-25.7	39.9	19.7					20.6	13.3	0.2	-25.8	-21.2	-22.4	11.4	19.5	1.9				
Earthquake Y Mode 4	0.1	1.5	-0.1					0.8	-0.1	0.0	0.0	-0.9	0.1	0.6	-0.1	0.0				
Earthquake Y Mode 5	-0.1	-5.6	-0.0					-3.1	-0.0	0.0	-0.1	3.6	0.1	-2.1	-0.0	0.0				
Earthquake Y Mode 6	-1.2	4.6	2.6					2.8	1.8	0.0	-1.2	-3.6	-3.1	1.7	2.6	0.2				
Earthquake Y Mode 7	-0.0	0.6	-0.1					0.4	-0.1	0.0	-0.0	-0.5	0.1	0.3	-0.1	0.0				
Earthquake Y Mode 8	-0.3	4.1	0.7					2.7	0.5	0.0	-0.4	-3.8	-0.9	1.9	0.7	0.0				
Earthquake Y Mode 9	-0.2	3.4	-0.0					2.2	-0.0	-0.0	-0.3	-3.0	0.0	1.6	-0.0	-0.0				
W41	techo	30.0	12.00/15.00					Self weight	83.0	-39.8	1.4	-39.5	1.2	0.2	54.9	72.3	-2.3	-15.8	1.8	0.3
								Dead load	60.0	-17.9	0.6	-27.5	0.6	0.3	57.0	59.7	-1.4	-7.6	1.0	0.3
								Live load	11.7	-17.1	0.0	-13.4	-0.0	0.0	11.3	21.1	-0.0	-6.5	0.1	0.0
								Wind +X ecc.+	1.9	-1.0	0.3	2.0	0.2	0.0	1.6	-6.7	-0.4	0.5	0.3	0.1
								Wind +X ecc.-	1.5	-1.1	0.2	1.9	0.2	0.1	1.3	-6.3	-0.3	0.4	0.2	0.1
								Wind -X ecc.+	-1.9	1.0	-0.3	-2.0	-0.2	-0.0	-1.6	6.7	0.4	-0.5	-0.3	-0.1
								Wind -X ecc.-	-1.5	1.1	-0.2	-1.9	-0.2	-0.1	-1.3	6.3	0.3	-0.4	-0.2	-0.1
				Wind +Y ecc.+	4.4	1.2	1.8	0.6	1.4	0.2	4.1	-0.5	-2.7	0.6	2.0	0.4				
				Wind +Y ecc.-	6.0	1.6	2.2	1.4	1.7	0.1	5.6	-2.4	-3.1	1.0	2.3	0.3				
				Wind -Y ecc.+	-4.4	-1.2	-1.8	-0.6	-1.4	-0.2	-4.1	0.5	2.7	-0.6	-2.0	-0.4				
				Wind -Y ecc.-	-6.0	-1.6	-2.2	-1.4	-1.7	-0.1	-5.6	2.4	3.1	-1.0	-2.3	-0.3				
				Earthquake X Mode 1	3.0	-3.2	0.7	4.2	0.5	0.9	2.4	-15.0	-0.8	0.7	0.7	1.0				
				Earthquake X Mode 2	-25.1	0.4	-1.7	-36.3	-1.1	0.2	-20.8	102.5	1.7	-12.3	-1.6	0.2				
				Earthquake X Mode 3	5.8	2.2	2.7	3.0	2.1	0.1	5.3	-6.4	-3.9	1.8	2.9	0.4				
				Earthquake X Mode 4	-2.3	-2.2	0.5	-1.9	0.3	-0.2	-2.1	3.3	-0.6	-1.0	0.5	-0.1				
				Earthquake X Mode 5	8.9	20.7	0.8	17.3	0.6	-0.0	7.6	-28.7	-1.2	10.2	0.9	0.1				
				Earthquake X Mode 6	0.6	-0.8	-0.6	-0.7	-0.4	-0.0	0.7	1.2	0.8	-0.5	-0.6	-0.1				
				Earthquake X Mode 7	1.6	1.4	-0.3	0.6	-0.2	0.0	1.5	-0.3	0.4	0.4	-0.4	0.0				
				Earthquake X Mode 8	-1.3	2.7	0.5	1.7	0.4	0.0	-1.4	-2.0	-0.7	1.2	0.6	0.1				
				Earthquake X Mode 9	3.4	14.6	-0.1	7.8	-0.0	-0.0	3.0	-7.7	0.0	5.6	-0.0	-0.0				
				Earthquake Y Mode 1	1.4	-1.5	0.3	1.9	0.2	0.4	1.1	-6.8	-0.4	0.3	0.3	0.5				
				Earthquake Y Mode 2	-7.7	0.1	-0.5	-11.2	-0.3	0.1	-6.4	31.6	0.5	-3.8	-0.5	0.1				
Earthquake Y Mode 3	35.9	13.8	16.7	18.8	12.9	0.7	32.5	-39.3	-23.7	10.9	17.7	2.5								
Earthquake Y Mode 4	-0.4	-0.4	0.1	-0.4	0.1	-0.0	-0.4	0.6	-0.1	-0.2	0.1	-0.0								
Earthquake Y Mode 5	1.6	3.8	0.2	3.1	0.1	-0.0	1.4	-5.2	-0.2	1.9	0.2	0.0								
Earthquake Y Mode 6	5.2	-7.0	-4.6	-5.9	-3.5	-0.2	5.6	9.9	6.4	-4.1	-4.9	-0.7								
Earthquake Y Mode 7	0.5	0.4	-0.1	0.2	-0.1	0.0	0.5	-0.1	0.1	0.1	-0.1	0.0								
Earthquake Y Mode 8	-3.3	6.8	1.3	4.1	1.0	0.1	-3.4	-5.1	-1.8	3.0	1.4	0.2								
Earthquake Y Mode 9	1.3	5.3	-0.0	2.8	-0.0	-0.0	1.1	-2.8	0.0	2.0	-0.0	-0.2								



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
	Floor 4	30.0	9.00/12.00	Self weight	167.7	-33.1	0.6	-26.2	0.4	0.2	142.0	43.4	-0.4	-7.2	0.1	-0.1			
				Dead load	75.2	0.5	0.2	3.8	0.2	0.1	74.4	-11.0	-0.2	5.4	0.1	-0.0			
				Live load	43.5	-18.6	0.3	-15.5	0.2	0.1	43.9	27.4	-0.2	-5.1	0.1	-0.1			
				Wind +X ecc.+	4.7	1.2	0.4	4.6	0.3	0.1	4.9	-12.3	-0.5	2.5	0.4	-0.0			
				Wind +X ecc.-	4.2	1.0	0.3	4.4	0.2	0.1	4.4	-11.7	-0.3	2.4	0.2	0.0			
				Wind -X ecc.+	-4.7	-1.2	-0.4	-4.6	-0.3	-0.1	-4.9	12.3	0.5	-2.5	-0.4	0.0			
				Wind -X ecc.-	-4.2	-1.0	-0.3	-4.4	-0.2	-0.1	-4.4	11.7	0.3	-2.4	-0.2	-0.0			
				Wind +Y ecc.+	3.6	2.1	3.0	1.1	2.3	0.4	3.5	-1.3	-3.7	1.1	2.3	0.1			
				Wind +Y ecc.-	5.9	3.1	3.5	2.4	2.7	0.2	5.8	-4.0	-4.5	1.9	2.9	-0.2			
				Wind -Y ecc.+	-3.6	-2.1	-3.0	-1.1	-2.3	-0.4	-3.5	1.3	3.7	-1.1	-2.3	-0.1			
				Wind -Y ecc.-	-5.9	-3.1	-3.5	-2.4	-2.7	-0.2	-5.8	4.0	4.5	-1.9	-2.9	0.2			
				Earthquake X Mode 1	9.3	4.4	0.7	11.5	0.4	1.2	10.0	-29.0	-0.5	6.4	0.3	1.1			
				Earthquake X Mode 2	-68.3	-37.6	-1.8	-67.3	-1.1	0.4	-70.2	159.5	1.8	-37.7	-1.9	1.2			
				Earthquake X Mode 3	5.4	4.7	4.0	4.7	3.1	0.3	5.4	-9.2	-5.0	3.3	3.2	-0.2			
				Earthquake X Mode 4	-5.6	-5.2	0.5	-2.2	0.3	-0.1	-5.2	1.6	-0.5	-1.5	0.3	-0.2			
				Earthquake X Mode 5	17.4	36.0	0.6	16.1	0.5	-0.0	15.3	-12.0	-0.9	11.0	0.6	-0.2			
				Earthquake X Mode 6	2.2	-1.0	-0.5	-0.6	-0.4	-0.0	2.1	0.7	0.6	-0.4	-0.4	0.0			
				Earthquake X Mode 7	2.2	1.0	0.0	-0.1	0.0	-0.0	2.0	1.1	-0.1	-0.1	0.1	-0.0			
				Earthquake X Mode 8	-2.0	0.9	-0.0	-0.3	-0.0	0.0	-2.1	1.8	0.1	-0.3	-0.1	-0.0			
				Earthquake X Mode 9	4.3	6.7	-0.1	-1.8	-0.0	0.0	2.7	11.0	-0.1	-1.5	0.0	-0.0			
				Earthquake Y Mode 1	4.2	2.0	0.3	5.2	0.2	0.5	4.6	-13.2	-0.2	2.9	0.1	0.5			
				Earthquake Y Mode 2	-21.1	-11.6	-0.6	-20.8	-0.4	0.1	-21.7	49.3	0.6	-11.6	-0.6	0.4			
				Earthquake Y Mode 3	33.2	29.2	24.9	29.2	19.0	1.7	33.5	-56.3	-30.9	20.4	19.8	-1.5			
				Earthquake Y Mode 4	-1.1	-1.0	0.1	-0.4	0.1	-0.0	-1.0	0.3	-0.1	-0.3	0.1	-0.0			
				Earthquake Y Mode 5	3.2	6.5	0.1	2.9	0.1	-0.0	2.8	-2.2	-0.2	2.0	0.1	-0.0			
				Earthquake Y Mode 6	17.8	-8.1	-4.3	-4.9	-3.2	-0.3	17.3	5.7	5.0	-3.7	-3.1	0.3			
				Earthquake Y Mode 7	0.7	0.3	0.0	-0.0	0.0	-0.0	0.6	0.3	-0.0	-0.0	0.0	-0.0			
				Earthquake Y Mode 8	-4.9	2.2	-0.1	-0.8	-0.1	0.0	-5.4	4.5	0.3	-0.7	-0.2	-0.0			
				Earthquake Y Mode 9	1.6	2.4	-0.0	-0.6	-0.0	0.0	1.0	4.0	-0.0	-0.5	0.0	-0.0			
				Floor 3	30.0	6.00/9.00	Self weight	253.3	-31.4	1.0	-26.4	0.7	0.2	224.7	43.3	-1.0	-8.2	0.5	-0.1
							Dead load	93.9	-1.8	0.1	-2.0	0.1	0.0	91.0	2.4	-0.1	-0.3	0.1	-0.0
							Live load	74.4	-17.0	0.5	-14.0	0.3	0.1	74.0	23.8	-0.5	-3.9	0.2	-0.1
							Wind +X ecc.+	9.0	6.0	0.6	7.3	0.4	0.1	9.1	-15.6	-0.7	4.3	0.5	-0.1
	Wind +X ecc.-	8.7	5.6				0.4	6.9	0.3	0.1	8.7	-14.8	-0.4	4.1	0.3	0.0			
	Wind -X ecc.+	-9.0	-6.0				-0.6	-7.3	-0.4	-0.1	-9.1	15.6	0.7	-4.3	-0.5	0.1			
	Wind -X ecc.-	-8.7	-5.6				-0.4	-6.9	-0.3	-0.1	-8.7	14.8	0.4	-4.1	-0.3	-0.0			
	Wind +Y ecc.+	-4.7	2.8				4.2	1.8	3.2	0.5	-4.4	-2.3	-5.1	1.7	3.2	0.0			
	Wind +Y ecc.-	-3.2	4.7				5.1	3.7	3.9	0.3	-2.8	-6.0	-6.3	3.0	4.0	-0.3			
	Wind -Y ecc.+	4.7	-2.8				-4.2	-1.8	-3.2	-0.5	4.4	2.3	5.1	-1.7	-3.2	-0.0			
	Wind -Y ecc.-	3.2	-4.7				-5.1	-3.7	-3.9	-0.3	2.8	6.0	6.3	-3.0	-4.0	0.3			
	Earthquake X Mode 1	22.0	16.4				0.3	16.6	0.2	1.4	21.7	-32.7	-0.1	9.9	0.0	1.3			
	Earthquake X Mode 2	-135.6	-97.6				-1.9	-93.2	-1.3	0.4	-132.5	177.9	2.3	-55.2	-2.3	1.5			
	Earthquake X Mode 3	-2.6	7.8				5.3	6.6	4.0	0.4	-2.3	-11.2	-6.4	4.7	4.1	-0.3			
	Earthquake X Mode 4	-7.3	-4.4				0.2	-0.3	0.1	-0.0	-6.5	-3.1	-0.1	-0.2	0.1	-0.0			
	Earthquake X Mode 5	20.8	27.5				-0.0	2.2	0.1	0.0	16.5	19.3	-0.3	1.2	0.1	-0.1			
Earthquake X Mode 6	2.9	-0.5	-0.1				-0.1	-0.1	-0.0	2.9	-0.2	0.1	-0.1	-0.1	0.0				
Earthquake X Mode 7	0.4	-1.1	0.3				-0.8	0.2	-0.0	0.4	1.1	-0.4	-0.6	0.3	-0.1				
Earthquake X Mode 8	-0.1	-2.4	-0.5				-1.7	-0.4	-0.0	-0.3	2.7	0.7	-1.4	-0.4	0.0				
Earthquake X Mode 9	1.0	-12.0	0.1				-8.6	0.0	0.0	0.2	12.7	-0.1	-6.7	0.0	0.0				
Earthquake Y Mode 1	10.0	7.4	0.1				7.6	0.1	0.6	9.9	-14.8	-0.1	4.5	0.0	0.6				
Earthquake Y Mode 2	-41.9	-30.1	-0.6				-28.8	-0.4	0.1	-40.9	55.0	0.7	-17.0	-0.7	0.5				
Earthquake Y Mode 3	-16.2	48.0	32.5				40.4	24.7	2.2	-14.1	-68.9	-39.5	28.9	25.2	-2.1				
Earthquake Y Mode 4	-1.4	-0.9	0.0				-0.1	0.0	-0.0	-1.2	-0.6	-0.0	-0.0	0.0	-0.0				
Earthquake Y Mode 5	3.8	5.0	-0.0				0.4	0.0	0.0	3.0	3.5	-0.0	0.2	0.0	-0.0				
Earthquake Y Mode 6	24.0	-3.9	-1.2				-0.9	-0.8	-0.1	23.8	-1.7	1.0	-0.6	-0.5	0.1				
Earthquake Y Mode 7	0.1	-0.3	0.1				-0.2	0.1	-0.0	0.1	0.3	-0.1	-0.2	0.1	-0.0				
Earthquake Y Mode 8	-0.4	-5.9	-1.3				-4.4	-1.0	-0.1	-0.8	6.6	1.6	-3.4	-1.1	0.1				
Earthquake Y Mode 9	0.4	-4.4	0.0				-3.1	0.0	0.0	0.1	4.6	-0.0	-2.4	0.0	0.0				
Floor 2	30.0	3.00/6.00	Self weight				337.4	-29.1	1.5	-24.3	1.1	0.3	306.3	37.4	-1.7	-7.3	0.9	-0.1	
			Dead load				112.5	-0.4	0.1	-0.5	0.1	0.0	109.2	-1.2	-0.1	0.8	0.1	-0.0	
			Live load				104.4	-16.0	0.8	-13.2	0.6	0.2	103.1	21.8	-0.8	-3.7	0.5	-0.1	
			Wind +X ecc.+				14.6	14.9	0.6	10.2	0.5	0.1	14.0	-15.3	-0.8	6.6	0.5	-0.1	
			Wind +X ecc.-	14.9	14.1	0.3	9.7	0.2	0.1	14.3	-14.5	-0.4	6.2	0.3	0.0				
			Wind -X ecc.+	-14.6	-14.9	-0.6	-10.2	-0.5	-0.1	-14.0	15.3	0.8	-6.6	-0.5	0.1				
			Wind -X ecc.-	-14.9	-14.1	-0.3	-9.7	-0.2	-0.1	-14.3	14.5	0.4	-6.2	-0.3	-0.0				
			Wind +Y ecc.+	-21.2	2.8	5.2	2.4	3.9	0.6	-20.2	-3.4	-6.1	2.2	3.8	-0.0				
			Wind +Y ecc.-	-22.7	6.6	6.5	5.1	4.9	0.4	-21.6	-7.4	-7.7	4.1	4.9	-0.4				
			Wind -Y ecc.+	21.2	-2.8	-5.2	-2.4	-3.9	-0.6	20.2	3.4	6.1	-2.2	-3.8	0.0				
			Wind -Y ecc.-	22.7	-6.6	-6.5	-5.1	-4.9	-0.4	21.6	7.4	7.7	-4.1	-4.9	0.4				
			Earthquake X Mode 1	40.7	33.6	-0.5	20.3	-0.4	1.3	38.6	-27.0	0.6	12.8	-0.5	1.3				
			Earthquake X Mode 2	-217.0	-187.5	-1.5	-113.3	-1.3	0.4	-205.2	150.7	2.7	-72.1	-2.5	1.6				
			Earthquake X Mode 3	-18.0	11.4	6.0	7.8	4.5	0.4	-17.3	-10.9	-7.0	5.8	4.4	-0.4				
			Earthquake X Mode 4	-5.2	0.2	-0.3	2.0	-0.2	0.1	-4.6	-5.4	0.4	1.5	-0.3	0.1				
			Earthquake X Mode 5	16.5	-5.0	-0.5	-15.1	-0.3	0.0	12.7	37.3	0.5	-11.2	-0.4	0.1				
			Earthquake X Mode 6	1.7	0.5	0.3	0.5	0.3	0.0	1.7	-1.1	-0.5	0.4	0.3	-0.0				
			Earthquake X Mode 7	-1.0	-1.1	0.1	-0.0	0.1	0.0	-0.8	-0.9	-0.0	-0.0	0.0	-0.0				
			Earthquake X Mode 8	1.3	-1.3	-0.1	-0.1	-0.1	-0.0	1.4	-0.9	0.1	-0.1	-0.0	0.0				
			Earthquake X Mode 9	-1.0	-8.6	0.1	-0.4	0.0	-0.0	0.2	-6.9	0.0	-0.2	-0.0	0.0				
			Earthquake Y Mode 1	18.5	15.2	-0.2	9.2	-0.2	0.6	17.5	-12.3	0.3	5.8	-0.2	0.6				
			Earthquake Y Mode 2	-67.0	-57.9	-0.5	-35.0	-0.4	0.1	-63.4	46.6	0.8	-22.3	-0.8	0.5				
Earthquake Y Mode 3	-110.8	70.5	36.7	48.3	27.5	2.4	-106.6	-67.3	-43.0	35.7	27.4	-2.5							
Earthquake Y Mode 4	-1.0	0.0	-0.1	0.4	-0.0	0.0	-0.9	-1.1	0.1	0.3	-0.1	0.0							
Earthquake Y Mode 5	3.0	-0.9	-0.1	-2.7	-0.1	0.0	2.3	6.8	0.1	-2.0	-0.1	0.0							
Earthquake Y Mode 6	13.7	4.1	2.8	4.4	2.2	0.2	14.1	-8.6	-3.8	3.4	2.5	-0.1							
Earthquake Y Mode 7	-0.3	-0.3	0.0	-0.0	0.0	0.0	-0.2	-0.3	-0.0	-0.0	0.0	-0.0							
Earthquake Y Mode 8	3.2	-3.2	-0.2	-0.3	-0.2	-0.0	3.5	-2.2	0.2	-0.2	-0.0	0.0							
Earthquake Y Mode 9	-0.4	-3.2	0.0	-0.2	0.0	-0.0	0.1	-2.5	0.0	-0.1	-0.0	0.0							



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 1	30.0	0.00/3.00	Self weight	422.3	-15.3	0.9	-18.2	0.8	0.2	388.5	31.1	-1.3	-3.0	0.6	-0.2				
				Dead load	129.7	-0.1	0.1	-0.5	0.1	0.0	125.8	-1.4	-0.1	0.6	0.1	-0.0				
				Live load	134.5	-8.5	0.5	-9.9	0.4	0.1	132.3	18.7	-0.7	-1.3	0.3	-0.1				
				Wind +X ecc.+	20.0	37.0	0.2	14.3	0.3	0.1	18.1	-5.7	-0.5	10.9	0.3	-0.1				
				Wind +X ecc.-	21.6	35.4	-0.0	13.6	0.1	0.1	19.7	-5.1	-0.2	10.4	0.1	-0.0				
				Wind -X ecc.+	-20.0	-37.0	-0.2	-14.3	-0.3	-0.1	-18.1	5.7	0.5	-10.9	-0.3	0.1				
				Wind -X ecc.-	-21.6	-35.4	0.0	-13.6	-0.1	-0.1	-19.7	5.1	0.2	-10.4	-0.1	0.0				
				Wind +Y ecc.+	-43.4	-1.2	4.1	1.3	3.0	0.4	-41.6	-3.6	-4.4	1.2	2.7	-0.1				
				Wind +Y ecc.-	-50.8	6.0	5.4	4.6	4.0	0.3	-48.9	-6.2	-5.9	3.8	3.7	-0.5				
				Wind -Y ecc.+	43.4	1.2	-4.1	-1.3	-3.0	-0.4	41.6	3.6	4.4	-1.2	-2.7	0.1				
				Wind -Y ecc.-	50.8	-6.0	-5.4	-4.6	-4.0	-0.3	48.9	6.2	5.9	-3.8	-3.7	0.5				
				Earthquake X Mode 1	63.8	70.9	-1.7	24.6	-1.0	0.8	58.4	-3.7	1.3	18.5	-1.0	0.9				
				Earthquake X Mode 2	-292.3	-381.2	0.8	-136.9	-0.3	0.2	-265.8	31.4	2.0	-103.1	-1.3	1.2				
				Earthquake X Mode 3	-38.3	16.0	4.4	7.7	3.2	0.3	-37.4	-5.6	-4.8	6.1	3.0	-0.4				
				Earthquake X Mode 4	-0.4	8.2	-0.5	3.7	-0.4	0.1	-0.5	-2.5	0.6	2.9	-0.4	0.1				
				Earthquake X Mode 5	8.2	-54.8	-0.3	-25.9	-0.3	0.0	8.2	20.4	0.6	-20.4	-0.4	0.2				
				Earthquake X Mode 6	-1.0	1.2	0.4	0.7	0.3	0.0	-0.9	-0.9	-0.5	0.6	0.3	-0.0				
				Earthquake X Mode 7	0.3	1.7	-0.2	1.0	-0.2	0.0	0.4	-1.2	0.3	0.8	-0.2	0.0				
				Earthquake X Mode 8	0.0	2.8	0.4	1.8	0.3	0.0	0.2	-2.4	-0.5	1.5	0.3	-0.0				
				Earthquake X Mode 9	1.4	16.4	-0.1	10.0	-0.1	-0.0	2.2	-12.4	0.1	8.3	-0.1	-0.0				
				Earthquake Y Mode 1	28.9	32.2	-0.8	11.2	-0.5	0.4	26.5	-1.7	0.6	8.4	-0.5	0.4				
				Earthquake Y Mode 2	-90.3	-117.8	0.3	-42.3	-0.1	0.1	-82.1	9.7	0.6	-31.8	-0.4	0.4				
				Earthquake Y Mode 3	-235.7	98.8	27.0	47.5	19.7	1.6	-230.4	-34.4	-29.3	37.4	18.2	-2.3				
				Earthquake Y Mode 4	-0.1	1.6	-0.1	0.7	-0.1	0.0	-0.1	-0.5	0.1	0.6	-0.1	0.0				
				Earthquake Y Mode 5	1.5	-10.0	-0.0	-4.7	-0.1	0.0	1.5	3.7	0.1	-3.7	-0.1	0.0				
				Earthquake Y Mode 6	-8.2	10.1	3.6	6.1	2.7	0.2	-7.6	-7.4	-4.3	4.9	2.7	-0.3				
				Earthquake Y Mode 7	0.1	0.5	-0.1	0.3	-0.1	0.0	0.1	-0.4	0.1	0.2	-0.1	0.0				
				Earthquake Y Mode 8	0.0	7.1	0.9	4.6	0.7	0.0	0.5	-6.0	-1.2	3.8	0.8	-0.1				
				Earthquake Y Mode 9	0.5	6.0	-0.0	3.7	-0.0	-0.0	0.8	-4.5	0.0	3.0	-0.0	-0.0				
				W42	techo	30.0	12.00/15.00	Self weight	85.2	-39.9	-1.1	-39.1	-0.8	-0.2	57.4	71.0	1.4	-16.8	-0.9	-0.2
								Dead load	69.3	-19.0	0.4	-30.7	0.2	-0.1	66.0	67.5	-0.1	-8.2	0.0	-0.0
								Live load	9.2	-17.1	-0.4	-13.0	-0.3	-0.1	8.9	20.0	0.5	-6.5	-0.4	-0.1
Wind +X ecc.+	1.0	-1.1	-0.3					2.0	-0.2	-0.0	0.7	-6.6	0.4	0.4	-0.3	-0.1				
Wind +X ecc.-	1.1	-1.1	-0.4					2.1	-0.3	-0.0	0.8	-6.8	0.5	0.5	-0.4	-0.0				
Wind -X ecc.+	-1.0	1.1	0.3					-2.0	0.2	0.0	-0.7	6.6	-0.4	-0.4	0.3	0.1				
Wind -X ecc.-	-1.1	1.1	0.4					-2.1	0.3	0.0	-0.8	6.8	-0.5	-0.5	0.4	0.0				
Wind +Y ecc.+	-1.4	-1.5	2.6					-1.1	2.0	0.3	-1.2	1.6	-3.8	-0.9	2.9	0.6				
Wind +Y ecc.-	-1.8	-1.6	3.0					-1.5	2.4	0.2	-1.6	2.6	-4.4	-1.1	3.3	0.5				
Wind -Y ecc.+	1.4	1.5	-2.6					1.1	-2.0	-0.3	1.2	-1.6	3.8	0.9	-2.9	-0.6				
Wind -Y ecc.-	1.8	1.6	-3.0					1.5	-2.4	-0.2	1.6	-2.6	4.4	1.1	-3.3	-0.5				
Earthquake X Mode 1	5.2	-1.7	-1.4					9.2	-1.1	0.6	4.1	-27.4	2.0	2.8	-1.5	0.6				
Earthquake X Mode 2	-19.4	-0.8	7.7					-34.9	5.8	1.3	-15.4	97.0	-10.7	-12.1	8.3	2.2				
Earthquake X Mode 3	-0.5	-1.9	3.3					-0.6	2.6	0.1	-0.4	-0.1	-4.9	-0.9	3.7	0.5				
Earthquake X Mode 4	-1.5	-4.9	0.9					-4.3	0.7	-0.1	-1.2	7.4	-1.3	-2.5	1.0	-0.0				
Earthquake X Mode 5	9.6	18.8	-0.9					15.6	-0.7	-0.2	8.4	-25.8	1.3	9.1	-1.0	-0.4				
Earthquake X Mode 6	-0.9	-0.0	-0.6					0.0	-0.5	-0.0	-0.8	-0.1	0.9	0.1	-0.7	-0.1				
Earthquake X Mode 7	-0.1	3.0	-0.4					1.7	-0.3	0.0	-0.2	-1.9	0.6	1.2	-0.4	-0.0				
Earthquake X Mode 8	1.7	2.3	0.5					1.1	0.4	0.0	1.6	-0.8	-0.7	0.8	0.5	0.1				
Earthquake X Mode 9	2.9	13.7	-0.4					7.3	-0.3	-0.1	2.6	-7.4	0.6	5.3	-0.4	-0.1				
Earthquake Y Mode 1	2.3	-0.8	-0.6					4.2	-0.5	0.3	1.8	-12.5	0.9	1.3	-0.7	0.3				
Earthquake Y Mode 2	-6.0	-0.3	2.4					-10.8	1.8	0.4	-4.8	30.0	-3.3	-3.7	2.6	0.7				
Earthquake Y Mode 3	-2.8	-11.6	20.5					-3.8	16.1	0.9	-2.2	-0.5	-30.0	-5.5	22.5	2.9				
Earthquake Y Mode 4	-0.3	-0.9	0.2					-0.8	0.1	-0.0	-0.2	1.4	-0.2	-0.5	0.2	-0.0				
Earthquake Y Mode 5	1.7	3.4	-0.2					2.8	-0.1	-0.0	1.5	-4.7	0.2	1.7	-0.2	-0.1				
Earthquake Y Mode 6	-7.0	-0.2	-5.0					0.1	-3.9	-0.2	-6.9	-0.6	7.2	0.5	-5.4	-0.7				
Earthquake Y Mode 7	-0.0	0.9	-0.1					0.5	-0.1	0.0	-0.1	-0.6	0.2	0.4	-0.1	-0.0				
Earthquake Y Mode 8	4.2	5.6	1.2					2.7	0.9	0.1	4.0	-2.1	-1.7	1.9	1.3	0.2				
Earthquake Y Mode 9	1.1	5.0	-0.1					2.7	-0.1	-0.0	0.9	-2.7	0.2	1.9	-0.1	-0.0				
Floor 4	30.0	9.00/12.00	Self weight		161.3	-34.0	-1.5	-26.6	-1.2	-0.3	135.5	43.8	1.8	-8.1	-1.0	0.1				
			Dead load		83.0	1.7	0.6	5.0	0.5	0.0	81.9	-13.5	-0.8	6.0	0.5	-0.0				
			Live load		38.8	-19.2	-0.4	-16.0	-0.3	-0.1	39.1	28.0	0.4	-5.7	-0.2	-0.0				
			Wind +X ecc.+		3.9	1.1	-0.4	4.5	-0.3	-0.1	4.1	-12.1	0.4	2.4	-0.3	0.0				
			Wind +X ecc.-		4.0	1.2	-0.5	4.7	-0.4	-0.0	4.2	-12.4	0.6	2.5	-0.4	0.1				
			Wind -X ecc.+		-3.9	-1.1	0.4	-4.5	0.3	0.1	-4.1	12.1	-0.4	-2.4	0.3	-0.0				
			Wind -X ecc.-		-4.0	-1.2	0.5	-4.7	0.4	0.0	-4.2	12.4	-0.6	-2.5	0.4	-0.1				
			Wind +Y ecc.+		0.3	-1.8	3.6	-1.1	2.8	0.4	0.3	1.3	-4.5	-1.0	2.8	0.0				
			Wind +Y ecc.-		-0.2	-2.3	4.3	-1.7	3.3	0.3	-0.2	2.8	-5.4	-1.4	3.4	-0.3				
			Wind -Y ecc.+		-0.3	1.8	-3.6	1.1	-2.8	-0.4	-0.3	-1.3	4.5	1.0	-2.8	-0.0				
			Wind -Y ecc.-		0.2	2.3	-4.3	1.7	-3.3	-0.3	0.2	-2.8	5.4	1.4	-3.4	0.3				
			Earthquake X Mode 1		16.4	9.4	-2.0	18.9	-1.5	0.8	17.1	-45.7	2.5	10.8	-1.9	1.3				
			Earthquake X Mode 2		-58.3	-37.6	9.6	-65.1	7.2	1.8	-60.2	152.7	-11.5	-37.0	7.5	0.1				
			Earthquake X Mode 3		3.5	-1.2	4.5	0.2	3.4	0.3	3.4	-1.8	-5.5	-0.3	3.5	-0.3				
			Earthquake X Mode 4		-3.1	-9.0	0.8	-4.3	0.6	-0.1	-2.7	3.8	-0.9	-3.0	0.6	-0.2				
			Earthquake X Mode 5		20.3	33.5	-0.7	14.9	-0.5	-0.2	18.2	-11.0	0.9	10.2	-0.6	0.0				
			Earthquake X Mode 6		-2.0	-0.4	-0.5	-0.1	-0.4	-0.0	-1.9	-0.1	0.6	-0.0	-0.4	0.0				
			Earthquake X Mode 7		-0.1	1.4	0.0	-0.3	0.0	-0.0	-0.4	2.1	-0.1	-0.2	0.1	-0.0				
			Earthquake X Mode 8		2.2	1.3	-0.0	-0.2	-0.0	0.0	1.9	1.8	0.1	-0.2	-0.1	0.0				
			Earthquake X Mode 9		3.7	6.2	0.1	-1.6	0.0	-0.0	2.2	10.3	-0.0	-1.4	0.0	0.0				
			Earthquake Y Mode 1		7.4	4.3	-0.9	8.6	-0.7	0.4	7.8	-20.7	1.1	4.9	-0.8	0.6				
			Earthquake Y Mode 2		-18.0	-11.6	3.0	-20.1	2.2	0.6	-18.6	47.2	-3.5	-11.4	2.3	0.0				
			Earthquake Y Mode 3		21.4	-7.6	27.5	1.2	21.2	1.7	20.9	-11.3	-34.1	-2.1	21.4	-1.7				
Earthquake Y Mode 4	-0.6	-1.7	0.2	-0.8	0.1	-0.0	-0.5	0.7	-0.2	-0.6	0.1	-0.0								
Earthquake Y Mode 5	3.7	6.1	-0.1	2.7	-0.1	-0.0	3.3	-2.0	0.2	1.8	-0.1	0.0								
Earthquake Y Mode 6	-16.8	-3.1	-4.5	-0.6	-3.3	-0.3	-15.9	-1.0	5.1	-0.2	-3.2	0.3								
Earthquake Y Mode 7	-0.0	0.4	0.0	-0.1	0.0	-0.0	-0.1	0.6	-0.0	-0.1	0.0	-0.0								
Earthquake Y Mode 8	5.5	3.1	-0.1	-0.6	-0.1	0.0	4.7	4.5	0.3	-0.5	-0.2	0.0								
Earthquake Y Mode 9	1.3	2.3	0.0	-0.6	0.0	-0.0	0.8	3.8	-0.0	-0.5	0.0	0.0								



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 3	30.0	6.00/9.00	Self weight	244.3	-32.8	-1.0	-27.3	-0.8	-0.2	215.6	44.5	1.0	-9.4	-0.5	0.0				
				Dead load	98.2	-1.1	0.4	-1.6	0.3	0.0	95.1	1.7	-0.5	-0.3	0.3	0.0				
				Live load	68.8	-17.7	-0.4	-14.5	-0.3	-0.1	68.5	24.4	0.4	-4.6	-0.2	0.0				
				Wind +X ecc.+	9.3	5.7	-0.5	7.1	-0.3	-0.1	9.3	-15.3	0.5	4.2	-0.4	0.1				
				Wind +X ecc.-	9.2	5.9	-0.7	7.4	-0.5	-0.0	9.2	-15.7	0.8	4.3	-0.6	0.1				
				Wind -X ecc.+	-9.3	-5.7	0.5	-7.1	0.3	0.1	-9.3	15.3	-0.5	-4.2	0.4	-0.1				
				Wind -X ecc.-	-9.2	-5.9	0.7	-7.4	0.5	0.0	-9.2	15.7	-0.8	-4.3	0.6	-0.1				
				Wind +Y ecc.+	6.3	-2.2	4.8	-1.5	3.7	0.6	6.0	1.9	-5.9	-1.3	3.7	-0.0				
				Wind +Y ecc.-	6.7	-3.2	5.8	-2.5	4.5	0.4	6.3	4.0	-7.2	-2.1	4.5	-0.4				
				Wind -Y ecc.+	-6.3	2.2	-4.8	1.5	-3.7	-0.6	-6.0	-1.9	5.9	1.3	-3.7	0.0				
				Wind -Y ecc.-	-6.7	3.2	-5.8	2.5	-4.5	-0.4	-6.3	-4.0	7.2	2.1	-4.5	0.4				
				Earthquake X Mode 1	34.1	27.2	-2.8	27.0	-2.1	1.0	33.5	-52.3	3.6	16.2	-2.6	1.6				
				Earthquake X Mode 2	-119.4	-94.4	11.1	-89.9	8.4	2.1	-116.5	170.8	-13.5	-53.7	8.8	-0.0				
				Earthquake X Mode 3	12.8	-0.1	5.6	0.3	4.3	0.3	12.2	-1.4	-6.8	-0.4	4.2	-0.4				
				Earthquake X Mode 4	-3.6	-7.0	0.3	-0.8	0.2	-0.0	-2.6	-4.2	-0.3	-0.5	0.2	-0.1				
				Earthquake X Mode 5	24.4	25.9	-0.1	2.0	-0.1	-0.1	20.2	18.1	0.3	1.1	-0.1	0.0				
				Earthquake X Mode 6	-2.6	-0.4	-0.2	0.0	-0.1	-0.0	-2.5	-0.4	0.1	0.0	-0.1	0.0				
				Earthquake X Mode 7	0.0	-2.5	0.4	-1.9	0.3	-0.0	-0.1	2.9	-0.5	-1.5	0.3	-0.1				
				Earthquake X Mode 8	0.4	-1.8	-0.5	-1.3	-0.4	-0.0	0.3	1.8	0.6	-1.0	-0.4	0.0				
				Earthquake X Mode 9	0.9	-11.4	0.3	-8.2	0.3	0.1	0.2	12.1	-0.4	-6.4	0.3	-0.0				
				Earthquake Y Mode 1	15.5	12.3	-1.3	12.3	-1.0	0.4	15.2	-23.8	1.6	7.4	-1.2	0.7				
				Earthquake Y Mode 2	-36.9	-29.2	3.4	-27.8	2.6	0.7	-36.0	52.8	-4.2	-16.6	2.7	-0.0				
				Earthquake Y Mode 3	78.6	-0.8	34.2	2.0	26.2	2.1	75.3	-8.5	-41.9	-2.2	26.1	-2.2				
				Earthquake Y Mode 4	-0.7	-1.4	0.1	-0.2	0.0	-0.0	-0.5	-0.8	-0.1	-0.1	0.0	-0.0				
				Earthquake Y Mode 5	4.4	4.7	-0.0	0.4	-0.0	-0.0	3.7	3.3	0.1	0.2	-0.0	0.0				
				Earthquake Y Mode 6	-21.3	-3.6	-1.4	0.3	-1.0	-0.1	-20.2	-3.6	1.2	0.3	-0.6	0.1				
				Earthquake Y Mode 7	0.0	-0.7	0.1	-0.6	0.1	-0.0	-0.0	0.9	-0.1	-0.4	0.1	-0.0				
				Earthquake Y Mode 8	1.1	-4.5	-1.2	-3.2	-0.9	-0.1	0.8	4.6	1.4	-2.5	-0.9	0.1				
				Earthquake Y Mode 9	0.3	-4.2	0.1	-3.0	0.1	0.0	0.1	4.4	-0.2	-2.3	0.1	-0.0				
					Floor 2	30.0	3.00/6.00	Self weight	330.6	-31.8	-0.6	-26.1	-0.5	-0.2	299.3	39.7	0.6	-9.2	-0.2	0.0
								Dead load	113.5	-0.1	0.3	-0.2	0.2	0.0	110.2	-1.8	-0.4	0.9	0.2	0.0
								Live load	99.9	-17.4	-0.2	-14.1	-0.2	-0.1	98.6	22.9	0.2	-4.7	-0.0	0.0
Wind +X ecc.+	17.2	14.6	-0.5					10.0	-0.4	-0.1	16.4	-15.0	0.6	6.4	-0.4	0.1				
Wind +X ecc.-	16.6	15.0	-0.8					10.3	-0.6	-0.0	15.9	-15.5	1.0	6.6	-0.7	0.2				
Wind -X ecc.+	-17.2	-14.6	0.5					-10.0	0.4	0.1	-16.4	15.0	-0.6	-6.4	0.4	-0.1				
Wind -X ecc.-	-16.6	-15.0	0.8					-10.3	0.6	0.0	-15.9	15.5	-1.0	-6.6	0.7	-0.2				
Wind +Y ecc.+	16.5	-2.0	5.6					-1.6	4.2	0.6	15.9	2.3	-6.6	-1.5	4.1	-0.1				
Wind +Y ecc.-	18.9	-4.0	6.9					-3.1	5.2	0.4	18.1	4.6	-8.3	-2.5	5.2	-0.5				
Wind -Y ecc.+	-16.5	2.0	-5.6					1.6	-4.2	-0.6	-15.9	-2.3	6.6	1.5	-4.1	0.1				
Wind -Y ecc.-	-18.9	4.0	-6.9					3.1	-5.2	-0.4	-18.1	-4.6	8.3	2.5	-5.2	0.5				
Earthquake X Mode 1	55.2	53.6	-3.4					33.3	-2.6	0.9	52.1	-45.4	4.3	21.4	-3.1	1.7				
Earthquake X Mode 2	-195.8	-178.7	10.7					-108.7	8.2	2.1	-184.6	145.1	-13.3	-69.5	8.6	-0.2				
Earthquake X Mode 3	26.5	2.2	6.0					0.7	4.5	0.3	25.3	-0.4	-7.1	-0.1	4.4	-0.4				
Earthquake X Mode 4	-2.8	1.1	-0.4					3.7	-0.3	0.1	-1.9	-9.2	0.6	2.8	-0.4	0.1				
Earthquake X Mode 5	18.0	-4.3	0.4					-13.9	0.3	0.1	14.5	34.6	-0.4	-10.3	0.3	0.0				
Earthquake X Mode 6	-1.8	-0.1	0.3					0.1	0.2	0.0	-1.7	-0.4	-0.4	0.1	0.3	-0.0				
Earthquake X Mode 7	0.3	-1.7	0.1					-0.2	0.1	0.0	0.5	-1.2	-0.1	-0.1	0.0	-0.0				
Earthquake X Mode 8	-0.9	-1.5	-0.1					-0.0	-0.1	-0.0	-0.6	-1.3	0.1	-0.0	-0.0	0.0				
Earthquake X Mode 9	-0.8	-8.1	0.0					-0.4	0.0	0.0	0.4	-6.4	-0.1	-0.2	0.0	-0.0				
Earthquake Y Mode 1	25.0	24.3	-1.5					15.1	-1.2	0.4	23.7	-20.6	2.0	9.7	-1.4	0.8				
Earthquake Y Mode 2	-60.5	-55.2	3.3					-33.6	2.5	0.6	-57.0	44.8	-4.1	-21.5	2.7	-0.1				
Earthquake Y Mode 3	162.9	13.4	36.9					4.0	27.8	2.1	155.8	-2.7	-43.7	-0.4	27.1	-2.5				
Earthquake Y Mode 4	-0.5	0.2	-0.1					0.7	-0.1	0.0	-0.4	-1.8	0.1	0.5	-0.1	0.0				
Earthquake Y Mode 5	3.3	-0.8	0.1					-2.5	0.0	0.0	2.6	6.3	-0.1	-1.9	0.1	0.0				
Earthquake Y Mode 6	-14.7	-1.0	2.5					0.9	2.0	0.1	-14.0	-3.2	-3.4	0.6	2.3	-0.1				
Earthquake Y Mode 7	0.1	-0.5	0.0					-0.0	0.0	0.0	0.2	-0.4	-0.0	-0.0	0.0	-0.0				
Earthquake Y Mode 8	-2.1	-3.7	-0.2					-0.1	-0.2	-0.0	-1.5	-3.2	0.1	-0.0	-0.0	0.0				
Earthquake Y Mode 9	-0.3	-3.0	0.0					-0.2	0.0	0.0	0.1	-2.3	-0.0	-0.1	0.0	-0.0				
	Floor 1	30.0	0.00/3.00					Self weight	424.4	-16.7	0.1	-19.5	-0.1	-0.1	390.1	33.2	0.2	-4.4	0.1	0.1
								Dead load	128.7	-0.2	0.2	-0.5	0.1	-0.0	124.8	-1.5	-0.2	0.5	0.1	0.0
								Live load	134.8	-9.3	0.1	-10.5	0.0	-0.1	132.3	19.7	-0.0	-2.1	0.1	0.0
				Wind +X ecc.+	25.5	36.8	-0.2	14.1	-0.2	-0.0	23.3	-5.5	0.4	10.8	-0.2	0.1				
				Wind +X ecc.-	24.2	37.6	-0.4	14.5	-0.4	-0.0	22.1	-5.8	0.7	11.1	-0.4	0.1				
				Wind -X ecc.+	-25.5	-36.8	0.2	-14.1	0.2	0.0	-23.3	5.5	-0.4	-10.8	0.2	-0.1				
				Wind -X ecc.-	-24.2	-37.6	0.4	-14.5	0.4	0.0	-22.1	5.8	-0.7	-11.1	0.4	-0.1				
				Wind +Y ecc.+	29.3	0.5	4.2	-0.8	3.1	0.4	28.2	2.1	-4.6	-0.7	2.8	-0.2				
				Wind +Y ecc.-	35.0	-3.1	5.5	-2.6	4.0	0.3	33.7	3.6	-6.1	-2.1	3.8	-0.5				
				Wind -Y ecc.+	-29.3	-0.5	-4.2	0.8	-3.1	-0.4	-28.2	-2.1	4.6	0.7	-2.8	0.2				
				Wind -Y ecc.-	-35.0	3.1	-5.5	2.6	-4.0	-0.3	-33.7	-3.6	6.1	2.1	-3.8	0.5				
				Earthquake X Mode 1	72.6	108.6	-2.7	40.1	-2.1	0.6	65.4	-11.8	3.6	30.3	-2.4	1.2				
				Earthquake X Mode 2	-268.3	-359.6	5.3	-130.1	4.5	1.3	-243.2	31.8	-7.8	-98.0	4.6	-0.4				
				Earthquake X Mode 3	41.8	8.8	4.4	2.0	3.2	0.2	39.9	1.8	-4.7	1.4	2.8	-0.4				
				Earthquake X Mode 4	-1.7	13.4	-0.6	6.5	-0.5	0.1	-1.7	-5.4	0.8	5.1	-0.5	0.2				
				Earthquake X Mode 5	5.9	-51.2	0.2	-24.0	0.2	0.1	6.1	18.7	-0.5	-18.9	0.3	-0.0				
				Earthquake X Mode 6	-0.1	0.7	0.4	0.3	0.3	0.0	-0.1	0.0	-0.5	0.2	0.3	-0.0				
				Earthquake X Mode 7	0.2	3.3	-0.3	2.1	-0.2	0.0	0.4	-2.7	0.3	1.7	-0.2	0.1				
				Earthquake X Mode 8	0.3	2.6	0.3	1.6	0.3	0.0	0.5	-1.8	-0.4	1.3	0.3	-0.0				
				Earthquake X Mode 9	1.2	15.5	-0.2	9.5	-0.2	-0.0	2.0	-11.8	0.3	7.8	-0.2	0.0				
				Earthquake Y Mode 1	32.9	49.3	-1.2	18.2	-1.0	0.3	29.7	-5.3	1.6	13.7	-1.1	0.6				
				Earthquake Y Mode 2	-82.9	-111.1	1.6	-40.2	1.4	0.4	-75.1	9.8	-2.4	-30.3	1.4	-0.1				
				Earthquake Y Mode 3	257.3	54.3	26.8	12.2	19.5	1.3	245.4	11.3	-28.7	8.4	17.5	-2.2				
				Earthquake Y Mode 4	-0.3	2.6	-0.1	1.2	-0.1	0.0	-0.3	-1.0	0.1	1.0	-0.1	0.0				
				Earthquake Y Mode 5	1.1	-9.3	0.0	-4.4	0.0	0.0	1.1	3.4	-0.1	-3.4	0.1	-0.0				
				Earthquake Y Mode 6	-0.6	6.1	3.5	2.1	2.6	0.2	-0.9	0.1	-4.0	1.6	2.5	-0.3				
				Earthquake Y Mode 7	0.1	1.0	-0.1	0.6	-0.1	0.0	0.1	-0.8	0.1	0.5	-0.1	0.0				
				Earthquake Y Mode 8	0.9	6.6	0.9	3.9	0.6	0.0	1.1	-4.6	-1.1	3.2	0.7	-0.1				
				Earthquake Y Mode 9	0.4	5.7	-0.1	3.5	-0.1	-0.0	0.7	-4.3	0.1	2.9	-0.1	0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
W43	techo	30.0	12.00/15.00	Self weight	58.7	-5.0	-8.4	-4.2	-7.4	0.2	36.9	7.0	13.7	-3.2	-5.3	0.4			
				Dead load	21.5	-2.1	-6.2	-2.4	-3.4	0.1	20.8	4.4	4.0	-1.3	-2.7	0.6			
				Live load	13.9	-2.2	-7.8	-1.7	-6.5	0.1	13.3	2.6	11.1	-1.4	-4.4	0.0			
				Wind +X ecc.+	1.0	0.2	1.3	0.2	1.1	-0.0	0.8	-0.5	-1.8	0.3	0.7	0.0			
				Wind +X ecc.-	1.1	0.2	1.4	0.2	1.1	-0.0	0.9	-0.5	-1.6	0.3	0.7	0.0			
				Wind -X ecc.+	-1.0	-0.2	-1.3	-0.2	-1.1	0.0	-0.8	0.5	1.8	-0.3	-0.7	-0.0			
				Wind -X ecc.-	-1.1	-0.2	-1.4	-0.2	-1.1	0.0	-0.9	0.5	1.6	-0.3	-0.7	-0.0			
				Wind +Y ecc.+	-1.5	0.0	0.5	-0.0	2.5	0.1	-1.6	0.0	-6.9	0.1	1.0	0.1			
				Wind +Y ecc.-	-1.7	0.2	0.4	0.1	2.8	-0.0	-1.8	-0.3	-7.9	0.2	1.1	0.0			
				Wind -Y ecc.+	1.5	-0.0	-0.5	0.0	-2.5	-0.1	1.6	-0.0	6.9	-0.1	-1.0	-0.1			
				Wind -Y ecc.-	1.7	-0.2	-0.4	-0.1	-2.8	0.0	1.8	0.3	7.9	-0.2	-1.1	-0.0			
				Earthquake X Mode 1	3.3	0.1	4.6	0.2	3.5	0.5	2.6	-0.5	-5.2	0.3	2.2	0.7			
				Earthquake X Mode 2	-18.8	-3.9	-17.0	-4.0	-11.6	0.8	-15.7	8.1	15.4	-5.0	-7.8	0.1			
				Earthquake X Mode 3	-0.5	0.3	3.0	0.3	4.9	-0.1	-0.8	-0.6	-11.2	0.4	2.4	0.1			
				Earthquake X Mode 4	-0.3	-0.1	1.6	-0.0	1.3	-0.1	-0.4	0.1	-2.3	-0.0	0.8	-0.1			
				Earthquake X Mode 5	6.5	1.3	3.7	1.1	3.2	-0.2	5.5	-2.0	-5.2	1.4	1.9	0.0			
				Earthquake X Mode 6	-0.7	-0.0	-2.1	-0.0	-1.8	0.0	-0.4	0.1	3.1	-0.1	-1.1	-0.0			
				Earthquake X Mode 7	-0.5	0.0	-2.6	0.0	-1.7	0.0	-0.4	0.0	2.2	-0.0	-1.1	0.0			
				Earthquake X Mode 8	1.4	0.1	4.0	0.1	2.6	-0.0	1.0	-0.1	-3.5	0.1	1.8	0.0			
				Earthquake X Mode 9	1.6	0.5	-1.0	0.3	-0.4	-0.0	1.4	-0.5	0.1	0.4	-0.3	0.0			
				Earthquake Y Mode 1	1.5	0.1	2.1	0.1	1.6	0.2	1.2	-0.2	-2.3	0.1	1.0	0.3			
				Earthquake Y Mode 2	-5.8	-1.2	-5.2	-1.2	-3.6	0.2	-4.8	2.5	4.7	-1.5	-2.4	0.0			
				Earthquake Y Mode 3	-2.9	2.0	18.2	1.7	30.2	-0.4	-5.1	-3.6	-69.1	2.7	15.0	0.3			
				Earthquake Y Mode 4	-0.1	-0.0	0.3	-0.0	0.3	-0.0	-0.1	0.0	-0.4	-0.0	0.2	-0.0			
				Earthquake Y Mode 5	1.2	0.2	0.7	0.2	0.6	-0.0	1.0	-0.4	-0.9	0.3	0.3	0.0			
				Earthquake Y Mode 6	-5.5	-0.4	-17.5	-0.3	-15.1	0.0	-3.7	0.7	25.7	-0.7	-9.3	-0.2			
				Earthquake Y Mode 7	-0.2	0.0	-0.8	0.0	-0.5	0.0	-0.1	0.0	0.6	-0.0	-0.3	0.0			
				Earthquake Y Mode 8	3.4	0.2	10.0	0.2	6.6	-0.0	2.6	-0.3	-8.8	0.3	4.4	0.1			
				Earthquake Y Mode 9	0.6	0.2	-0.4	0.1	-0.1	-0.0	0.5	-0.2	0.0	0.2	-0.1	0.0			
				Floor 4	30.0	9.00/12.00	Self weight	133.7	-3.9	-15.1	-3.0	-13.0	0.0	109.2	4.7	23.3	-2.7	-7.9	-0.1
							Dead load	54.2	-0.1	-7.1	0.0	-6.6	-0.0	51.4	-0.2	12.6	0.2	-3.8	0.0
							Live load	38.1	-2.1	-6.1	-1.7	-4.7	0.0	36.5	2.7	8.1	-1.6	-2.5	-0.1
							Wind +X ecc.+	3.5	0.3	1.7	0.3	1.3	-0.0	3.3	-0.6	-2.1	0.3	0.8	0.0
							Wind +X ecc.-	3.4	0.3	1.5	0.3	1.0	0.0	3.2	-0.5	-1.4	0.3	0.6	0.1
							Wind -X ecc.+	-3.5	-0.3	-1.7	-0.3	-1.3	0.0	-3.3	0.6	2.1	-0.3	-0.8	-0.0
							Wind -X ecc.-	-3.4	-0.3	-1.5	-0.3	-1.0	-0.0	-3.2	0.5	1.4	-0.3	-0.6	-0.1
	Wind +Y ecc.+	-1.9	0.1				6.2	0.0	7.9	0.1	-1.8	-0.0	-17.2	0.0	4.7	0.1			
	Wind +Y ecc.-	-1.7	0.2				7.0	0.2	9.3	-0.0	-1.7	-0.3	-20.5	0.2	5.6	-0.0			
	Wind -Y ecc.+	1.9	-0.1				-6.2	-0.0	-7.9	-0.1	1.8	0.0	17.2	-0.0	-4.7	-0.1			
	Wind -Y ecc.-	1.7	-0.2				-7.0	-0.2	-9.3	0.0	1.7	0.3	20.5	-0.2	-5.6	0.0			
	Earthquake X Mode 1	9.4	0.4				4.7	0.4	2.6	0.7	8.9	-0.8	-2.9	0.4	1.5	0.9			
	Earthquake X Mode 2	-54.7	-5.0				-12.0	-4.5	-5.9	0.8	-51.4	8.1	5.6	-4.3	-3.4	0.3			
	Earthquake X Mode 3	1.5	0.4				10.3	0.3	11.2	-0.1	1.3	-0.6	-22.9	0.3	6.7	-0.0			
	Earthquake X Mode 4	-0.7	-0.1				3.0	-0.0	1.8	-0.1	-0.7	0.0	-2.2	-0.0	1.1	-0.1			
	Earthquake X Mode 5	14.8	1.3				1.9	0.8	1.8	-0.1	14.0	-0.9	-3.6	0.7	0.9	-0.0			
Earthquake X Mode 6	-1.6	-0.0	-3.3				-0.0	-2.0	0.0	-1.5	0.0	2.7	-0.0	-1.2	0.0				
Earthquake X Mode 7	-0.7	0.0	-1.0				-0.0	0.2	-0.0	-0.6	0.0	-1.3	-0.0	0.3	-0.0				
Earthquake X Mode 8	1.9	0.0	1.3				-0.0	-0.3	-0.0	1.7	0.0	2.0	-0.0	-0.4	-0.0				
Earthquake X Mode 9	2.4	0.1	-0.9				-0.1	0.1	0.0	2.3	0.3	-1.0	-0.1	0.0	0.0				
Earthquake Y Mode 1	4.3	0.2	2.1				0.2	1.2	0.3	4.0	-0.4	-1.3	0.2	0.7	0.4				
Earthquake Y Mode 2	-16.9	-1.6	-3.7				-1.4	-1.8	0.3	-15.9	2.5	1.7	-1.3	-1.0	0.1				
Earthquake Y Mode 3	9.1	2.5	63.6				2.0	69.2	-0.4	8.0	-3.4	-141.0	1.9	41.5	-0.3				
Earthquake Y Mode 4	-0.1	-0.0	0.6				-0.0	0.3	-0.0	-0.1	0.0	-0.4	-0.0	0.2	-0.0				
Earthquake Y Mode 5	2.7	0.2	0.3				0.1	0.3	-0.0	2.5	-0.2	-0.7	0.1	0.2	-0.0				
Earthquake Y Mode 6	-13.0	-0.4	-26.8				-0.3	-16.4	0.0	-12.0	0.4	22.0	-0.2	-9.9	0.0				
Earthquake Y Mode 7	-0.2	0.0	-0.3				-0.0	0.1	-0.0	-0.2	0.0	-0.4	-0.0	0.1	-0.0				
Earthquake Y Mode 8	4.7	0.0	3.1				-0.0	-0.8	-0.0	4.3	0.1	4.9	-0.1	-1.1	-0.0				
Earthquake Y Mode 9	0.9	0.0	-0.3				-0.0	0.0	0.0	0.8	0.1	-0.4	-0.0	0.0	0.0				
Floor 3	30.0	6.00/9.00	Self weight				204.3	-3.6	-10.3	-2.9	-7.7	0.0	177.5	4.7	12.7	-2.7	-3.8	-0.1	
			Dead load				79.9	-0.3	-5.4	-0.2	-4.7	-0.0	76.4	0.4	8.7	-0.3	-2.5	0.0	
			Live load				62.7	-2.0	-5.2	-1.5	-4.0	0.0	60.1	2.5	6.7	-1.5	-2.2	-0.1	
			Wind +X ecc.+				7.5	0.5	2.1	0.4	1.7	-0.0	7.1	-0.8	-2.8	0.4	1.0	0.0	
			Wind +X ecc.-				7.2	0.5	1.6	0.4	1.1	0.0	6.8	-0.7	-1.6	0.4	0.7	0.1	
			Wind -X ecc.+				-7.5	-0.5	-2.1	-0.4	-1.7	0.0	-7.1	0.8	2.8	-0.4	-1.0	-0.0	
			Wind -X ecc.-				-7.2	-0.5	-1.6	-0.4	-1.1	-0.0	-6.8	0.7	1.6	-0.4	-0.7	-0.1	
			Wind +Y ecc.+	0.7	0.1	12.9	0.0	12.5	0.1	0.4	-0.1	-24.3	0.0	7.4	0.1				
			Wind +Y ecc.-	2.2	0.3	15.3	0.2	15.2	-0.1	1.9	-0.4	-29.8	0.2	9.1	-0.1				
			Wind -Y ecc.+	-0.7	-0.1	-12.9	-0.0	-12.5	-0.1	-0.4	0.1	24.3	-0.0	-7.4	-0.1				
			Wind -Y ecc.-	-2.2	-0.3	-15.3	-0.2	-15.2	0.1	-1.9	0.4	29.8	-0.2	-9.1	0.1				
			Earthquake X Mode 1	17.9	0.6	3.3	0.5	1.3	0.8	17.0	-0.9	-0.6	0.6	0.7	1.1				
			Earthquake X Mode 2	-104.7	-7.1	-8.6	-5.7	-5.7	1.0	-99.3	9.7	8.2	-5.5	-3.6	0.3				
			Earthquake X Mode 3	7.4	0.5	18.0	0.4	16.0	-0.1	6.7	-0.7	-29.4	0.4	9.5	-0.1				
			Earthquake X Mode 4	-0.8	-0.1	2.3	-0.0	0.5	-0.0	-0.8	-0.1	0.7	0.0	0.2	-0.0				
			Earthquake X Mode 5	18.6	0.7	-0.0	0.2	0.6	-0.0	17.8	0.3	-2.0	-0.0	0.2	0.0				
			Earthquake X Mode 6	-2.0	-0.0	-2.0	-0.0	-0.4	0.0	-1.9	0.0	-0.5	-0.0	-0.1	0.0				
			Earthquake X Mode 7	-0.1	-0.0	2.4	-0.0	1.9	-0.0	-0.1	0.0	-3.1	-0.0	1.4	-0.0				
			Earthquake X Mode 8	0.5	-0.1	-3.7	-0.1	-2.9	0.0	0.5	0.1	4.7	-0.1	-2.1	-0.0				
			Earthquake X Mode 9	1.0	-0.4	1.1	-0.3	0.8	0.0	1.0	0.5	-1.2	-0.3	0.6	0.0				
			Earthquake Y Mode 1	8.1	0.3	1.5	0.2	0.6	0.4	7.7	-0.4	-0.3	0.3	0.3	0.5				
			Earthquake Y Mode 2	-32.4	-2.2	-2.7	-1.8	-1.8	0.3	-30.7	3.0	2.5	-1.7	-1.1	0.1				
			Earthquake Y Mode 3	45.4	3.2	110.7	2.5	98.3	-0.5	41.5	-4.2	-181.1	2.4	58.2	-0.4				
			Earthquake Y Mode 4	-0.1	-0.0	0.4	-0.0	0.1	-0.0	-0.2	-0.0	0.1	0.0	0.0	-0.0				
			Earthquake Y Mode 5	3.4	0.1	-0.0	0.0	0.1	-0.0	3.2	0.0	-0.4	-0.0	0.0	0.0				
			Earthquake Y Mode 6	-16.5	-0.1	-16.3	-0.1	-3.6	0.0	-15.5	0.1	-4.3	-0.0	-0.9	0.0				
			Earthquake Y Mode 7	-0.0	-0.0	0.7	-0.0	0.6	-0.0	-0.0	0.0	-0.9	-0.0	0.4	-0.0				
			Earthquake Y Mode 8	1.1	-0.2	-9.3	-0.2	-7.3	0.0	1.2	0.3	11.8	-0.2	-5.3	-0.0				
			Earthquake Y Mode 9	0.4	-0.2	0.4	-0.1	0.3	0.0	0.4	0.2	-0.4	-0.1	0.2	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 2	30.0	3.00/6.00	Self weight	269.8	-3.4	-3.3	-2.6	-2.9	0.0	240.6	4.3	5.3	-2.5	-1.0	-0.1				
				Dead load	101.6	-0.0	-3.1	-0.0	-3.2	-0.0	97.3	0.1	6.4	-0.1	-1.7	0.0				
				Live load	85.2	-1.8	-1.2	-1.4	-1.1	0.0	81.8	2.3	2.2	-1.4	-0.3	-0.0				
				Wind +X ecc.+	13.1	0.7	2.3	0.5	1.9	-0.0	12.4	-0.8	-3.2	0.5	1.1	0.0				
				Wind +X ecc.-	12.1	0.6	1.3	0.5	0.9	0.0	11.6	-0.7	-1.5	0.4	0.6	0.1				
				Wind -X ecc.+	-13.1	-0.7	-2.3	-0.5	-1.9	0.0	-12.4	0.8	3.2	-0.5	-1.1	-0.0				
				Wind -X ecc.-	-12.1	-0.6	-1.3	-0.5	-0.9	-0.0	-11.6	0.7	1.5	-0.4	-0.6	-0.1				
				Wind +Y ecc.+	6.9	0.1	22.4	0.0	17.3	0.1	6.2	-0.1	-29.0	0.1	10.5	0.1				
				Wind +Y ecc.-	11.3	0.4	27.2	0.3	21.5	-0.1	10.3	-0.5	-36.7	0.3	13.0	-0.1				
				Wind -Y ecc.+	-6.9	-0.1	-22.4	-0.0	-17.3	-0.1	-6.2	0.1	29.0	-0.1	-10.5	-0.1				
				Wind -Y ecc.-	-11.3	-0.4	-27.2	-0.3	-21.5	0.1	-10.3	0.5	36.7	-0.3	-13.0	0.1				
				Earthquake X Mode 1	27.1	0.9	-0.0	0.6	-1.1	0.8	25.9	-0.8	3.1	0.6	-0.8	1.1				
				Earthquake X Mode 2	-164.1	-8.7	-0.3	-6.1	-3.4	1.0	-156.4	9.0	9.8	-5.6	-1.9	0.2				
				Earthquake X Mode 3	17.4	0.6	26.5	0.4	19.6	-0.1	16.1	-0.7	-31.7	0.4	11.6	-0.1				
				Earthquake X Mode 4	-0.9	0.0	-0.4	0.0	-1.4	0.1	-0.9	-0.1	3.6	0.1	-1.0	0.1				
				Earthquake X Mode 5	15.2	-0.5	-1.5	-0.6	-0.9	0.1	14.8	1.3	1.1	-0.7	-0.7	0.0				
				Earthquake X Mode 6	-1.3	0.0	1.0	0.0	1.6	-0.0	-1.3	-0.0	-3.6	0.0	1.2	-0.0				
				Earthquake X Mode 7	0.4	-0.0	1.5	-0.0	0.4	-0.0	0.3	-0.0	0.4	0.0	0.1	-0.0				
				Earthquake X Mode 8	-0.6	-0.0	-2.1	-0.0	-0.4	0.0	-0.5	-0.0	-0.6	0.0	-0.1	-0.0				
				Earthquake X Mode 9	-0.1	-0.2	1.0	-0.0	0.1	0.0	-0.1	-0.1	0.7	0.0	0.0	-0.0				
				Earthquake Y Mode 1	12.3	0.4	-0.0	0.3	-0.5	0.4	11.7	-0.4	1.4	0.3	-0.4	0.5				
				Earthquake Y Mode 2	-50.7	-2.7	-0.1	-1.9	-1.1	0.3	-48.3	2.8	3.0	-1.7	-0.6	0.1				
				Earthquake Y Mode 3	107.2	3.6	163.3	2.7	120.4	-0.5	99.4	-4.2	-195.0	2.5	71.7	-0.4				
				Earthquake Y Mode 4	-0.2	0.0	-0.1	0.0	-0.3	0.0	-0.2	-0.0	0.7	0.0	-0.2	0.0				
				Earthquake Y Mode 5	2.8	-0.1	-0.3	-0.1	-0.2	0.0	2.7	0.2	0.2	-0.1	-0.1	0.0				
				Earthquake Y Mode 6	-10.9	0.2	8.6	0.2	13.3	-0.0	-10.6	-0.3	-29.3	0.2	9.9	-0.0				
				Earthquake Y Mode 7	0.1	-0.0	0.5	-0.0	0.1	-0.0	0.1	-0.0	0.1	0.0	0.0	-0.0				
				Earthquake Y Mode 8	-1.5	-0.1	-5.1	-0.0	-1.1	0.0	-1.3	-0.0	-1.5	0.0	-0.2	-0.0				
				Earthquake Y Mode 9	-0.0	-0.1	0.4	-0.0	0.0	0.0	-0.0	-0.0	0.3	0.0	0.0	-0.0				
					Floor 1	30.0	0.00/3.00	Self weight	324.2	-1.3	4.3	-1.5	1.6	0.0	293.1	3.0	-0.9	-1.4	1.5	-0.0
								Dead load	119.1	0.0	0.0	0.0	-1.1	-0.0	114.2	-0.0	3.3	-0.0	-0.5	0.1
								Live load	102.3	-0.7	2.8	-0.8	1.1	-0.0	98.3	1.6	-0.6	-0.7	0.9	-0.0
								Wind +X ecc.+	18.6	1.1	1.2	0.5	1.2	-0.0	17.8	-0.5	-2.5	0.5	0.6	0.0
								Wind +X ecc.-	16.8	1.0	-1.7	0.5	-0.4	0.0	16.0	-0.5	-0.7	0.4	-0.4	0.1
								Wind -X ecc.+	-18.6	-1.1	-1.2	-0.5	-1.2	0.0	-17.8	0.5	2.5	-0.5	-0.6	-0.0
								Wind -X ecc.-	-16.8	-1.0	1.7	-0.5	0.4	-0.0	-16.0	0.5	0.7	-0.4	0.4	-0.1
Wind +Y ecc.+	16.7	-0.1	44.1					0.0	22.3	0.1	15.4	-0.1	-22.0	0.0	14.6	0.1				
Wind +Y ecc.-	25.4	0.3	57.6					0.2	29.7	-0.1	23.6	-0.4	-30.2	0.2	19.6	-0.1				
Wind -Y ecc.+	-16.7	0.1	-44.1					-0.0	-22.3	-0.1	-15.4	0.1	22.0	-0.0	-14.6	-0.1				
Wind -Y ecc.-	-25.4	-0.3	-57.6					-0.2	-29.7	0.1	-23.6	0.4	30.2	-0.2	-19.6	0.1				
Earthquake X Mode 1	32.1	1.4	-19.8					0.6	-9.9	0.5	31.0	-0.4	8.9	0.5	-7.4	0.8				
Earthquake X Mode 2	-216.1	-11.2	22.9					-5.6	3.8	0.7	-206.9	5.1	12.3	-4.8	3.8	-0.0				
Earthquake X Mode 3	30.2	0.6	45.4					0.4	22.7	-0.1	28.3	-0.5	-22.1	0.3	14.6	-0.1				
Earthquake X Mode 4	-1.6	0.1	-5.8					0.1	-3.4	0.1	-1.4	-0.1	4.0	0.1	-2.4	0.1				
Earthquake X Mode 5	7.8	-1.6	-0.9					-0.9	-1.3	0.1	7.7	1.1	2.8	-0.9	-0.7	0.0				
Earthquake X Mode 6	0.2	0.0	4.9					0.0	2.8	-0.0	0.1	-0.0	-3.4	0.0	2.0	-0.0				
Earthquake X Mode 7	-0.1	0.0	-3.0					0.0	-2.0	0.0	-0.1	-0.0	2.8	0.0	-1.6	0.0				
Earthquake X Mode 8	0.4	0.1	4.5					0.1	3.1	-0.0	0.4	-0.1	-4.3	0.1	2.4	0.0				
Earthquake X Mode 9	0.7	0.5	-1.8					0.3	-1.1	-0.0	0.7	-0.5	1.3	0.4	-0.9	-0.0				
Earthquake Y Mode 1	14.6	0.6	-9.0					0.3	-4.5	0.2	14.1	-0.2	4.0	0.2	-3.4	0.3				
Earthquake Y Mode 2	-66.7	-3.5	7.1					-1.7	1.2	0.2	-63.9	1.6	3.8	-1.5	1.2	-0.0				
Earthquake Y Mode 3	186.0	3.6	279.3					2.2	139.7	-0.4	174.1	-2.8	-136.0	1.9	89.7	-0.4				
Earthquake Y Mode 4	-0.3	0.0	-1.1					0.0	-0.7	0.0	-0.3	-0.0	0.8	0.0	-0.5	0.0				
Earthquake Y Mode 5	1.4	-0.3	-0.2					-0.2	-0.2	0.0	1.4	0.2	0.5	-0.2	-0.1	0.0				
Earthquake Y Mode 6	1.6	0.4	40.0					0.2	23.3	-0.0	0.9	-0.4	-28.3	0.2	16.2	-0.0				
Earthquake Y Mode 7	-0.0	0.0	-0.9					0.0	-0.6	0.0	-0.0	-0.0	0.9	0.0	-0.5	0.0				
Earthquake Y Mode 8	1.0	0.2	11.2					0.1	7.6	-0.0	0.9	-0.2	-10.7	0.2	5.9	0.0				
Earthquake Y Mode 9	0.3	0.2	-0.6					0.1	-0.4	-0.0	0.2	-0.2	0.5	0.1	-0.3	-0.0				
W44	techo	30.0	12.00/15.00					Self weight	5.3	-4.9	25.7	-4.1	10.6	-0.1	-10.4	7.3	-6.8	-4.3	3.6	0.1
								Dead load	46.2	-2.3	5.6	-2.8	5.6	0.1	42.4	5.9	-10.5	-3.1	3.9	0.1
								Live load	14.2	-2.2	11.7	-1.7	9.9	-0.1	13.7	2.9	-17.6	-1.8	5.4	0.1
								Wind +X ecc.+	1.4	0.3	-1.3	0.3	-1.1	0.0	1.3	-0.6	2.0	0.3	-0.8	-0.0
								Wind +X ecc.-	1.6	0.4	-1.3	0.3	-1.2	0.0	1.5	-0.7	2.2	0.4	-0.8	-0.0
								Wind -X ecc.+	-1.4	-0.3	1.3	-0.3	1.1	-0.0	-1.3	0.6	-2.0	-0.3	0.8	0.0
								Wind -X ecc.-	-1.6	-0.4	1.3	-0.3	1.2	-0.0	-1.5	0.7	-2.2	-0.4	0.8	0.0
				Wind +Y ecc.+	-3.0	-0.1	1.0	-0.0	2.9	0.1	-2.9	0.0	-7.7	-0.0	1.6	0.1				
				Wind +Y ecc.-	-3.7	-0.2	0.9	-0.2	3.2	-0.0	-3.5	0.3	-8.7	-0.2	1.8	-0.0				
				Wind -Y ecc.+	3.0	0.1	-1.0	0.0	-2.9	-0.1	2.9	-0.0	7.7	0.0	-1.6	-0.1				
				Wind -Y ecc.-	3.7	0.2	-0.9	0.2	-3.2	0.0	3.5	-0.3	8.7	0.2	-1.8	0.0				
				Earthquake X Mode 1	6.4	1.9	-3.9	1.8	-3.9	0.6	5.9	-3.4	7.4	1.8	-2.6	0.4				
				Earthquake X Mode 2	-23.8	-4.5	19.9	-4.3	20.0	0.2	-22.1	8.1	-38.5	-4.6	13.1	0.8				
				Earthquake X Mode 3	-3.3	-0.1	2.3	-0.0	4.3	-0.0	-3.2	0.1	-10.3	-0.0	2.4	-0.0				
				Earthquake X Mode 4	-1.7	-0.5	2.9	-0.4	2.5	-0.1	-1.6	0.8	-4.5	-0.4	1.7	-0.1				
				Earthquake X Mode 5	4.4	1.3	-3.0	1.1	-2.8	-0.0	4.1	-1.9	5.2	1.2	-1.9	-0.2				
				Earthquake X Mode 6	0.4	0.0	-2.0	0.0	-1.7	0.0	0.4	-0.0	3.0	0.0	-1.1	0.0				
				Earthquake X Mode 7	0.5	0.2	-2.8	0.1	-1.8	0.0	0.4	-0.2	2.4	0.1	-1.2	0.0				
				Earthquake X Mode 8	-0.1	0.1	3.7	0.1	2.3	0.0	-0.1	-0.1	-3.0	0.1	1.6	-0.0				
				Earthquake X Mode 9	1.2	0.5	-2.2	0.3	-1.5	-0.0	1.1	-0.5	2.3	0.4	-1.1	-0.0				
				Earthquake Y Mode 1	2.9	0.8	-1.8	0.8	-1.8	0.3	2.7	-1.5	3.4	0.8	-1.2	0.2				
				Earthquake Y Mode 2	-7.3	-1.4	6.2	-1.3	6.2	0.1	-6.8	2.5	-11.9	-1.4	4.0	0.3				
				Earthquake Y Mode 3	-20.5	-0.5	13.8	-0.3	26.2	-0.2	-19.6	0.4	-63.7	-0.3	15.0	-0.2				
				Earthquake Y Mode 4	-0.3	-0.1	0.6	-0.1	0.5	-0.0	-0.3	0.1	-0.9	-0.1	0.3	-0.0				
Earthquake Y Mode 5	0.8	0.2	-0.6	0.2	-0.5	-0.0	0.7	-0.3	0.9	0.2	-0.3	-0.0								
Earthquake Y Mode 6	3.2	0.0	-16.5	0.0	-13.9	0.0	3.1	-0.0	24.3	0.0	-9.2	0.0								
Earthquake Y Mode 7	0.1	0.1	-0.8	0.0	-0.5	0.0	0.1	-0.1	0.7	0.0	-0.4	0.0								
Earthquake Y Mode 8	-0.2	0.2	9.3	0.1	5.7	0.0	-0.2	-0.2	-7.4	0.1	4.1	-0.0								
Earthquake Y Mode 9	0.4	0.2	-0.8	0.1	-0.6	-0.0	0.4	-0.2	0.9	0.1	-0.4	-0.0								



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
	Floor 4	30.0	9.00/12.00	Self weight	122.1	-4.0	33.5	-3.1	32.4	-0.1	102.9	4.4	-61.4	-1.6	12.6	-0.8			
				Dead load	61.9	0.3	6.1	0.4	5.0	0.1	61.4	-1.1	-8.3	0.9	1.3	-0.1			
				Live load	43.4	-2.2	13.3	-1.7	11.9	-0.1	45.0	2.5	-22.4	-1.0	3.5	-0.4			
				Wind +X ecc.+	3.4	0.4	-1.4	0.4	-1.0	0.0	3.0	-0.8	1.8	0.5	-0.6	-0.0			
				Wind +X ecc.-	3.6	0.5	-1.5	0.4	-1.4	0.1	3.2	-0.8	2.5	0.5	-0.8	0.0			
				Wind -X ecc.+	-3.4	-0.4	1.4	-0.4	1.0	-0.0	-3.0	0.8	-1.8	-0.5	0.6	0.0			
				Wind -X ecc.-	-3.6	-0.5	1.5	-0.4	1.4	-0.1	-3.2	0.8	-2.5	-0.5	0.8	-0.0			
				Wind +Y ecc.+	-3.1	-0.1	7.0	-0.0	8.9	0.1	-1.6	0.1	-18.8	-0.3	4.8	0.3			
				Wind +Y ecc.-	-4.3	-0.3	7.8	-0.2	10.3	-0.0	-2.5	0.5	-22.2	-0.5	5.6	0.1			
				Wind -Y ecc.+	3.1	0.1	-7.0	0.0	-8.9	-0.1	1.6	-0.1	18.8	0.3	-4.8	-0.3			
				Wind -Y ecc.-	4.3	0.3	-7.8	0.2	-10.3	0.0	2.5	-0.5	22.2	0.5	-5.6	-0.1			
				Earthquake X Mode 1	15.0	2.4	-4.6	2.1	-4.7	0.9	13.3	-3.9	9.2	2.5	-2.6	0.7			
				Earthquake X Mode 2	-48.8	-6.0	28.8	-5.2	26.1	0.2	-41.8	9.6	-48.0	-6.3	14.6	1.2			
				Earthquake X Mode 3	-2.5	-0.1	9.9	-0.0	11.4	-0.0	-0.8	0.2	-23.1	-0.4	6.2	0.1			
				Earthquake X Mode 4	-2.6	-0.5	4.1	-0.3	2.7	-0.1	-2.1	0.5	-4.0	-0.4	1.6	-0.1			
				Earthquake X Mode 5	8.9	1.3	-2.6	0.8	-2.1	-0.0	8.0	-1.1	3.6	0.8	-1.2	-0.2			
				Earthquake X Mode 6	-0.2	-0.0	-3.3	0.0	-2.1	0.0	-0.5	-0.0	2.8	0.1	-1.2	-0.0			
				Earthquake X Mode 7	0.4	0.0	-1.0	-0.0	0.1	-0.0	0.3	0.1	-1.2	-0.0	0.1	-0.0			
				Earthquake X Mode 8	0.3	0.0	1.4	-0.0	-0.2	-0.0	0.4	0.1	1.9	-0.1	-0.2	0.0			
				Earthquake X Mode 9	1.5	0.1	-0.6	-0.1	0.1	0.0	1.4	0.3	-0.7	-0.2	0.1	-0.0			
				Earthquake Y Mode 1	6.8	1.1	-2.1	0.9	-2.1	0.4	6.0	-1.8	4.2	1.1	-1.2	0.3			
				Earthquake Y Mode 2	-15.1	-1.8	8.9	-1.6	8.1	0.1	-12.9	3.0	-14.8	-1.9	4.5	0.4			
				Earthquake Y Mode 3	-15.5	-0.4	61.1	-0.2	69.9	-0.3	-4.8	1.2	-142.4	-2.4	38.1	0.6			
				Earthquake Y Mode 4	-0.5	-0.1	0.8	-0.1	0.5	-0.0	-0.4	0.1	-0.8	-0.1	0.3	-0.0			
				Earthquake Y Mode 5	1.6	0.2	-0.5	0.2	-0.4	-0.0	1.5	-0.2	0.7	0.1	-0.2	-0.0			
				Earthquake Y Mode 6	-1.7	-0.0	-27.1	0.0	-17.2	0.0	-3.8	-0.3	23.3	0.5	-10.0	-0.2			
				Earthquake Y Mode 7	0.1	0.0	-0.3	-0.0	0.0	-0.0	0.1	0.0	-0.4	-0.0	0.0	-0.0			
				Earthquake Y Mode 8	0.8	0.0	3.5	-0.0	-0.6	-0.0	0.9	0.2	4.6	-0.2	-0.5	0.0			
				Earthquake Y Mode 9	0.5	0.0	-0.2	-0.0	0.0	0.0	0.5	0.1	-0.2	-0.1	0.0	-0.0			
				Floor 3	30.0	6.00/9.00	Self weight	216.5	-3.7	21.7	-2.9	20.9	-0.1	196.0	4.4	-40.3	-1.8	3.6	-0.7
							Dead load	79.5	-0.0	4.9	-0.1	4.3	0.0	78.3	0.2	-7.2	-0.2	0.7	-0.1
							Live load	72.9	-2.0	9.5	-1.6	9.4	-0.1	73.5	2.3	-18.6	-0.9	1.4	-0.4
							Wind +X ecc.+	6.1	0.7	-1.5	0.6	-1.2	0.0	5.6	-1.0	2.1	0.7	-0.7	-0.0
	Wind +X ecc.-	6.4	0.7				-2.0	0.6	-1.8	0.1	5.7	-1.1	3.3	0.7	-1.0	0.0			
	Wind -X ecc.+	-6.1	-0.7				1.5	-0.6	1.2	-0.0	-5.6	1.0	-2.1	-0.7	0.7	0.0			
	Wind -X ecc.-	-6.4	-0.7				2.0	-0.6	1.8	-0.1	-5.7	1.1	-3.3	-0.7	1.0	-0.0			
	Wind +Y ecc.+	-0.8	-0.1				13.8	-0.0	13.7	0.1	1.4	0.2	-26.3	-0.5	7.4	0.4			
	Wind +Y ecc.-	-2.1	-0.3				16.3	-0.3	16.5	-0.1	0.6	0.7	-32.0	-0.8	8.9	0.2			
	Wind -Y ecc.+	0.8	0.1				-13.8	0.0	-13.7	-0.1	-1.4	-0.2	26.3	0.5	-7.4	-0.4			
	Wind -Y ecc.-	2.1	0.3				-16.3	0.3	-16.5	0.1	-0.6	-0.7	32.0	0.8	-8.9	-0.2			
	Earthquake X Mode 1	25.6	3.3				-7.4	2.7	-7.3	1.0	23.1	-4.8	14.3	3.3	-4.3	0.9			
	Earthquake X Mode 2	-78.9	-8.1				37.1	-6.5	31.3	0.2	-69.6	11.5	-55.5	-7.9	17.7	1.4			
Earthquake X Mode 3	1.0	-0.1	17.5				-0.0	16.1	-0.1	3.5	0.3	-29.6	-0.6	8.7	0.2				
Earthquake X Mode 4	-3.0	-0.2	2.6				-0.1	0.9	-0.0	-2.7	0.0	-0.2	-0.1	0.5	0.0				
Earthquake X Mode 5	11.1	0.6	-1.0				0.2	-0.7	0.0	10.5	0.2	1.3	-0.1	-0.4	-0.1				
Earthquake X Mode 6	-0.5	-0.0	-2.0				0.0	-0.5	0.0	-0.6	-0.0	-0.5	0.0	-0.2	-0.0				
Earthquake X Mode 7	0.4	-0.1	2.5				-0.1	2.0	-0.0	0.6	0.2	-3.3	-0.2	1.3	-0.0				
Earthquake X Mode 8	-0.2	-0.1	-3.5				-0.1	-2.8	-0.0	-0.4	0.1	4.5	-0.0	-1.8	-0.0				
Earthquake X Mode 9	0.9	-0.4	1.9				-0.3	1.6	0.0	1.0	0.6	-2.6	-0.4	1.0	0.0				
Earthquake Y Mode 1	11.6	1.5	-3.3				1.2	-3.3	0.5	10.5	-2.2	6.5	1.5	-1.9	0.4				
Earthquake Y Mode 2	-24.4	-2.5	11.4				-2.0	9.7	0.1	-21.5	3.6	-17.2	-2.4	5.5	0.4				
Earthquake Y Mode 3	5.9	-0.3	107.9				-0.2	99.0	-0.3	21.4	1.7	-182.0	-3.5	53.5	1.0				
Earthquake Y Mode 4	-0.6	-0.0	0.5				-0.0	0.2	-0.0	-0.5	0.0	-0.0	-0.0	0.1	0.0				
Earthquake Y Mode 5	2.0	0.1	-0.2				0.0	-0.1	0.0	1.9	0.0	0.2	-0.0	-0.1	-0.0				
Earthquake Y Mode 6	-4.1	-0.0	-16.5				0.0	-3.7	0.0	-5.2	-0.3	-4.3	0.4	-1.7	-0.1				
Earthquake Y Mode 7	0.1	-0.0	0.7				-0.0	0.6	-0.0	0.2	0.1	-1.0	-0.0	0.4	-0.0				
Earthquake Y Mode 8	-0.5	-0.2	-8.8				-0.1	-7.1	-0.0	-0.9	0.2	11.4	-0.1	-4.6	-0.0				
Earthquake Y Mode 9	0.3	-0.2	0.7				-0.1	0.6	0.0	0.4	0.2	-0.9	-0.2	0.4	0.0				
Floor 2	30.0	3.00/6.00	Self weight				285.1	-3.4	5.7	-2.6	10.4	-0.1	262.4	3.9	-24.6	-1.5	-3.2	-0.7	
			Dead load				94.3	0.2	2.5	0.1	2.6	0.1	92.7	-0.2	-4.7	0.1	-0.5	-0.1	
			Live load				91.1	-1.8	1.3	-1.4	3.8	-0.0	91.2	2.1	-10.4	-0.7	-2.1	-0.4	
			Wind +X ecc.+				9.4	0.9	-1.4	0.7	-1.1	0.0	8.8	-1.1	2.0	0.7	-0.7	-0.0	
			Wind +X ecc.-	9.6	1.0	-2.4	0.7	-2.0	0.1	8.8	-1.2	3.7	0.8	-1.2	-0.0				
			Wind -X ecc.+	-9.4	-0.9	1.4	-0.7	1.1	-0.0	-8.8	1.1	-2.0	-0.7	0.7	0.0				
			Wind -X ecc.-	-9.6	-1.0	2.4	-0.7	2.0	-0.1	-8.8	1.2	-3.7	-0.8	1.2	0.0				
			Wind +Y ecc.+	3.8	-0.0	23.1	-0.0	18.5	0.1	6.5	0.3	-31.0	-0.6	10.2	0.4				
			Wind +Y ecc.-	3.0	-0.4	27.8	-0.3	22.8	-0.1	6.3	0.8	-38.9	-1.0	12.6	0.2				
			Wind -Y ecc.+	-3.8	0.0	-23.1	0.0	-18.5	-0.1	-6.5	-0.3	31.0	0.6	-10.2	-0.4				
			Wind -Y ecc.-	-3.0	0.4	-27.8	0.3	-22.8	0.1	-6.3	-0.8	38.9	1.0	-12.6	-0.2				
			Earthquake X Mode 1	36.6	3.9	-9.9	2.9	-9.4	1.1	33.3	-4.7	18.0	3.4	-5.5	0.8				
			Earthquake X Mode 2	-111.3	-9.6	41.8	-6.9	31.7	0.1	-100.7	11.0	-52.8	-7.9	18.3	1.5				
			Earthquake X Mode 3	6.5	-0.0	25.8	-0.0	19.6	-0.1	9.3	0.4	-31.8	-0.7	10.8	0.2				
			Earthquake X Mode 4	-3.1	0.2	-0.8	0.2	-1.7	0.1	-3.1	-0.5	4.0	0.3	-1.1	0.1				
			Earthquake X Mode 5	10.0	-0.6	1.1	-0.6	0.8	0.0	9.8	1.4	-1.2	-0.9	0.5	0.0				
			Earthquake X Mode 6	-0.1	0.0	1.0	0.0	1.6	0.0	-0.0	-0.0	-3.6	-0.0	1.0	0.0				
			Earthquake X Mode 7	0.4	-0.1	1.5	-0.0	0.4	-0.0	0.6	-0.0	0.3	-0.0	0.2	0.0				
			Earthquake X Mode 8	-0.5	-0.0	-2.1	-0.0	-0.4	0.0	-0.7	-0.0	-0.7	0.1	-0.2	-0.0				
			Earthquake X Mode 9	0.4	-0.2	0.9	-0.0	0.2	-0.0	0.5	-0.1	0.2	0.0	0.1	0.0				
			Earthquake Y Mode 1	16.6	1.8	-4.5	1.3	-4.3	0.5	15.1	-2.2	8.2	1.5	-2.5	0.4				
			Earthquake Y Mode 2	-34.4	-3.0	12.9	-2.1	9.8	0.0	-31.1	3.4	-16.3	-2.4	5.7	0.5				
			Earthquake Y Mode 3	40.1	-0.0	159.0	-0.2	120.8	-0.4	57.5	2.2	-195.5	-4.2	66.3	1.2				
			Earthquake Y Mode 4	-0.6	0.0	-0.2	0.0	-0.3	0.0	-0.6	-0.1	0.8	0.1	-0.2	0.0				
Earthquake Y Mode 5	1.8	-0.1	0.2	-0.1	0.2	0.0	1.8	0.2	-0.2	-0.2	0.1	0.0							
Earthquake Y Mode 6	-0.8	0.0	8.0	0.0	13.3	0.0	-0.0	-0.1	-29.6	-0.1	8.3	0.0							
Earthquake Y Mode 7	0.1	-0.0	0.5	-0.0	0.1	-0.0	0.2	-0.0	0.1	-0.0	0.1	0.0							
Earthquake Y Mode 8	-1.4	-0.1	-5.2	-0.0	-1.1	0.0	-1.7	-0.1	-1.7	0.1	-0.5	-0.0							
Earthquake Y Mode 9	0.1	-0.1	0.3	-0.0	0.1	-0.0	0.2	-0.0	0.1	0.0	0.0	0.0							



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	30.0	0.00/3.00	Self weight	303.7	-1.3	4.7	-1.4	1.3	-0.0	280.7	2.4	1.1	-0.4	-6.8	-0.7
				Dead load	102.9	0.1	2.2	0.1	1.1	0.1	101.0	-0.2	-0.4	0.1	-1.2	-0.1
				Live load	83.1	-0.7	1.7	-0.8	-0.6	-0.0	83.5	1.3	2.9	-0.1	-3.6	-0.4
				Wind +X ecc.+	12.4	1.1	-0.5	0.6	-0.6	0.0	11.8	-0.7	1.4	0.6	-0.4	-0.0
				Wind +X ecc.-	12.4	1.2	-3.5	0.7	-2.2	0.1	11.6	-0.8	3.1	0.7	-1.4	-0.0
				Wind -X ecc.+	-12.4	-1.1	0.5	-0.6	0.6	-0.0	-11.8	0.7	-1.4	-0.6	0.4	0.0
				Wind -X ecc.-	-12.4	-1.2	3.5	-0.7	2.2	-0.1	-11.6	0.8	-3.1	-0.7	1.4	0.0
				Wind +Y ecc.+	9.1	0.1	45.5	0.0	23.5	0.1	11.2	0.3	-23.4	-0.6	14.8	0.4
				Wind +Y ecc.-	9.1	-0.3	59.2	-0.2	31.1	-0.1	11.8	0.7	-31.6	-1.0	19.6	0.2
				Wind -Y ecc.+	-9.1	-0.1	-45.5	-0.0	-23.5	-0.1	-11.2	-0.3	23.4	0.6	-14.8	-0.4
				Wind -Y ecc.-	-9.1	0.3	-59.2	0.2	-31.1	0.1	-11.8	-0.7	31.6	1.0	-19.6	-0.2
				Earthquake X Mode 1	44.9	4.3	-24.7	2.4	-14.8	0.7	41.6	-2.8	18.9	2.5	-9.8	0.4
				Earthquake X Mode 2	-137.7	-10.6	42.8	-5.7	24.1	0.0	-128.3	6.1	-30.2	-5.6	15.1	1.2
				Earthquake X Mode 3	12.3	0.1	46.2	0.0	23.3	-0.1	14.3	0.4	-22.0	-0.6	14.5	0.2
				Earthquake X Mode 4	-2.9	0.5	-6.3	0.3	-3.9	0.1	-3.2	-0.5	4.9	0.4	-2.5	0.0
				Earthquake X Mode 5	7.1	-1.5	1.0	-0.9	0.8	0.0	7.2	1.2	-1.4	-1.0	0.3	0.1
				Earthquake X Mode 6	0.6	0.0	4.9	0.0	2.9	-0.0	0.8	0.0	-3.5	-0.0	1.9	0.0
				Earthquake X Mode 7	0.3	0.1	-3.1	0.1	-2.1	0.0	0.3	-0.2	3.0	0.1	-1.5	0.0
				Earthquake X Mode 8	-0.1	0.1	4.5	0.1	3.0	0.0	-0.0	-0.1	-4.2	0.1	2.1	0.0
				Earthquake X Mode 9	0.7	0.5	-2.2	0.3	-1.5	-0.0	0.6	-0.5	2.2	0.4	-1.1	-0.0
				Earthquake Y Mode 1	20.4	1.9	-11.2	1.1	-6.7	0.3	18.9	-1.3	8.6	1.1	-4.5	0.2
				Earthquake Y Mode 2	-42.5	-3.3	13.2	-1.8	7.4	0.0	-39.6	1.9	-9.3	-1.7	4.7	0.4
				Earthquake Y Mode 3	75.6	0.8	284.4	0.1	143.2	-0.4	88.1	2.2	-135.3	-3.8	89.2	1.2
				Earthquake Y Mode 4	-0.6	0.1	-1.2	0.1	-0.8	0.0	-0.6	-0.1	0.9	0.1	-0.5	0.0
				Earthquake Y Mode 5	1.3	-0.3	0.2	-0.2	0.2	0.0	1.3	0.2	-0.3	-0.2	0.1	0.0
				Earthquake Y Mode 6	5.0	0.1	40.7	0.0	23.9	-0.0	6.6	0.2	-28.5	-0.4	15.5	0.2
				Earthquake Y Mode 7	0.1	0.0	-0.9	0.0	-0.6	0.0	0.1	-0.1	0.9	0.0	-0.5	0.0
				Earthquake Y Mode 8	-0.2	0.2	11.2	0.1	7.6	0.0	-0.1	-0.2	-10.4	0.1	5.3	0.0
				Earthquake Y Mode 9	0.3	0.2	-0.8	0.1	-0.6	-0.0	0.2	-0.2	0.8	0.2	-0.4	-0.0
W45	techo	30.0	12.00/15.00	Self weight	46.8	-5.5	0.3	-5.4	0.3	0.1	25.0	9.6	-0.4	-2.7	0.2	0.1
				Dead load	17.9	-2.3	0.5	-1.3	0.2	0.1	16.5	1.6	0.1	-0.6	-0.1	0.2
				Live load	5.4	-3.3	-0.3	-3.2	-0.2	0.0	4.9	5.6	0.3	-1.6	-0.2	0.0
				Wind +X ecc.+	-0.6	2.7	-0.1	3.6	-0.1	-0.0	-0.5	-7.5	0.2	1.5	-0.2	0.0
				Wind +X ecc.-	-0.6	2.5	-0.2	3.4	-0.2	0.0	-0.5	-7.1	0.3	1.4	-0.3	0.0
				Wind -X ecc.+	0.6	-2.7	0.1	-3.6	0.1	0.0	0.5	7.5	-0.2	-1.5	0.2	-0.0
				Wind -X ecc.-	0.6	-2.5	0.2	-3.4	0.2	-0.0	0.5	7.1	-0.3	-1.4	0.3	-0.0
				Wind +Y ecc.+	-0.9	0.2	1.1	0.2	0.9	0.1	-0.7	-0.2	-1.6	0.1	1.1	0.2
				Wind +Y ecc.-	-0.9	1.0	1.5	1.1	1.2	0.1	-0.7	-1.9	-2.2	0.5	1.5	0.1
				Wind -Y ecc.+	0.9	-0.2	-1.1	-0.2	-0.9	-0.1	0.7	0.2	1.6	-0.1	-1.1	-0.2
				Wind -Y ecc.-	0.9	-1.0	-1.5	-1.1	-1.2	-0.1	0.7	1.9	-2.2	-0.5	-1.5	-0.1
				Earthquake X Mode 1	-2.7	6.6	-1.5	8.9	-1.3	0.5	-2.3	-18.2	2.3	3.6	-1.7	0.5
				Earthquake X Mode 2	10.1	-47.3	2.8	-57.5	2.3	0.5	8.0	113.6	-4.4	-24.7	3.8	0.4
				Earthquake X Mode 3	-1.3	2.7	1.7	3.0	1.4	0.1	-1.0	-5.7	-2.4	1.3	1.7	0.1
				Earthquake X Mode 4	1.2	-3.0	0.7	-2.7	0.6	-0.1	1.1	4.5	-1.0	-1.4	0.7	-0.1
				Earthquake X Mode 5	-5.9	21.1	-0.2	18.4	-0.2	-0.1	-5.1	-30.8	0.4	9.3	-0.4	-0.1
				Earthquake X Mode 6	0.1	-0.5	-0.3	-0.4	-0.3	-0.0	0.1	0.7	0.5	-0.2	-0.3	-0.0
				Earthquake X Mode 7	-0.4	1.0	-0.3	0.7	-0.2	0.0	-0.4	-1.0	0.4	0.4	-0.3	0.0
				Earthquake X Mode 8	-0.2	1.6	0.3	1.1	0.2	0.0	-0.2	-1.4	-0.4	0.6	0.3	0.0
				Earthquake X Mode 9	-2.2	9.5	-0.1	6.4	-0.1	-0.0	-1.9	-8.5	0.2	3.7	-0.2	-0.0
				Earthquake Y Mode 1	-1.2	3.0	-0.7	4.0	-0.6	0.2	-1.0	-8.3	1.0	1.6	-0.8	0.2
				Earthquake Y Mode 2	3.1	-14.6	0.9	-17.8	0.7	0.1	2.5	35.1	-1.4	-7.6	1.2	0.1
				Earthquake Y Mode 3	-7.8	16.6	10.3	18.6	8.5	0.3	-6.1	-35.3	-15.0	8.1	10.4	0.6
				Earthquake Y Mode 4	0.2	-0.6	0.1	-0.5	0.1	-0.0	0.2	0.9	-0.2	-0.3	0.1	-0.0
				Earthquake Y Mode 5	-1.1	3.8	-0.0	3.3	-0.0	-0.0	-0.9	-5.6	0.1	1.7	-0.1	-0.0
				Earthquake Y Mode 6	0.8	-3.7	-2.8	-3.4	-2.2	-0.1	0.6	5.7	3.9	-1.6	-2.8	-0.1
				Earthquake Y Mode 7	-0.1	0.3	-0.1	0.2	-0.1	0.0	-0.1	-0.3	0.1	0.1	-0.1	0.0
				Earthquake Y Mode 8	-0.5	3.9	0.8	2.7	0.6	0.0	-0.4	-3.6	-1.0	1.5	0.7	0.0
				Earthquake Y Mode 9	-0.8	3.5	-0.1	2.3	-0.0	-0.0	-0.7	-3.1	0.1	1.4	-0.1	-0.0
	Floor 4	30.0	9.00/12.00	Self weight	98.9	-4.2	-0.4	-3.5	-0.3	0.0	76.5	6.6	0.4	-1.7	-0.2	0.2
				Dead load	42.7	-2.6	1.0	-2.4	0.8	0.1	40.7	4.5	-1.7	-1.4	1.5	0.3
				Live load	21.0	-2.0	-0.3	-1.4	-0.2	-0.0	20.0	2.5	0.3	-0.6	-0.2	0.1
				Wind +X ecc.+	-1.3	4.9	-0.1	5.5	-0.1	0.0	-1.7	-11.3	0.2	3.0	-0.1	0.0
				Wind +X ecc.-	-1.3	4.7	-0.3	5.3	-0.2	0.0	-1.6	-10.8	0.4	2.9	-0.3	0.0
				Wind -X ecc.+	1.3	-4.9	0.1	-5.5	0.1	-0.0	1.7	11.3	-0.2	-3.0	0.1	-0.0
				Wind -X ecc.-	1.3	-4.7	0.3	-5.3	0.2	-0.0	1.6	10.8	-0.4	-2.9	0.3	-0.0
				Wind +Y ecc.+	-0.9	-0.0	1.6	-0.1	1.3	0.2	-0.9	0.3	-2.5	-0.0	2.0	0.4
				Wind +Y ecc.-	-1.0	1.0	2.2	0.9	1.7	0.1	-1.0	-1.9	-3.4	0.6	2.8	0.3
				Wind -Y ecc.+	0.9	0.0	-1.6	0.1	-1.3	-0.2	0.9	-0.3	2.5	0.0	-2.0	-0.4
				Wind -Y ecc.-	1.0	-1.0	-2.2	-0.9	-1.7	-0.1	1.0	1.9	3.4	-0.6	-2.8	-0.3
				Earthquake X Mode 1	-5.9	13.1	-2.1	13.9	-1.6	0.6	-6.7	-27.6	3.1	7.6	-2.5	0.6
				Earthquake X Mode 2	21.7	-77.7	3.3	-78.1	2.5	0.6	26.5	152.6	-4.5	-43.7	3.3	0.7
				Earthquake X Mode 3	-1.5	3.5	2.3	3.4	1.8	0.1	-1.6	-6.7	-3.6	2.0	2.9	0.3
				Earthquake X Mode 4	2.4	-3.8	0.6	-2.2	0.5	-0.1	2.5	2.9	-0.8	-1.4	0.7	-0.0
				Earthquake X Mode 5	-10.4	24.5	-0.1	14.2	-0.1	-0.1	-10.8	-18.0	0.2	8.7	-0.1	-0.1
				Earthquake X Mode 6	-0.0	-0.5	-0.3	-0.3	-0.2	-0.0	0.0	0.4	0.4	-0.2	-0.4	-0.0
				Earthquake X Mode 7	-0.6	0.3	-0.0	-0.1	0.0	-0.0	-0.6	0.5	-0.1	-0.1	0.0	-0.0
				Earthquake X Mode 8	-0.1	0.4	0.0	-0.2	-0.0	0.0	-0.1	0.8	0.1	-0.1	-0.0	0.0
				Earthquake X Mode 9	-2.5	2.2	0.0	-1.3	-0.0	0.0	-2.3	5.4	0.0	-0.9	0.0	0.0
				Earthquake Y Mode 1	-2.7	6.0	-0.9	6.3	-0.7	0.3	-3.1	-12.5	1.4	3.5	-1.1	0.3
				Earthquake Y Mode 2	6.7	-24.0	1.0	-24.1	0.8	0.2	8.2	47.1	-1.4	-13.5	1.0	0.2



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 3	30.0	6.00/9.00	Self weight	149.7	-2.9	-0.1	-2.5	-0.1	0.0	126.3	5.2	-0.0	-1.0	0.2	0.2				
				Dead load	66.1	-1.3	0.9	-0.9	0.7	0.1	63.6	1.7	-1.4	-0.4	1.3	0.3				
				Live load	36.3	-1.6	-0.2	-1.4	-0.2	0.0	35.0	2.7	0.2	-0.6	-0.1	0.1				
				Wind +X ecc.+	-3.7	8.6	-0.2	8.0	-0.1	0.0	-4.1	-15.0	0.2	4.6	-0.1	0.0				
				Wind +X ecc.-	-3.7	8.2	-0.3	7.7	-0.3	0.0	-4.1	-14.4	0.5	4.4	-0.4	0.0				
				Wind -X ecc.+	3.7	-8.6	0.2	-8.0	0.1	-0.0	4.1	15.0	-0.2	-4.6	0.1	-0.0				
				Wind -X ecc.-	3.7	-8.2	0.3	-7.7	0.3	-0.0	4.1	14.4	-0.5	-4.4	0.4	-0.0				
				Wind +Y ecc.+	-0.4	-0.4	2.3	-0.4	1.8	0.2	-0.3	0.5	-3.4	-0.2	2.7	0.5				
				Wind +Y ecc.-	-0.3	1.1	3.1	1.1	2.4	0.1	-0.3	-2.2	-4.7	0.6	3.8	0.4				
				Wind -Y ecc.+	0.4	0.4	-2.3	0.4	-1.8	-0.2	0.3	-0.5	3.4	0.2	-2.7	-0.5				
				Wind -Y ecc.-	0.3	-1.1	-3.1	-1.1	-2.4	-0.1	0.3	2.2	4.7	-0.6	-3.8	-0.4				
				Earthquake X Mode 1	-13.8	21.7	-2.8	18.9	-2.2	0.7	-14.6	-34.1	4.1	10.9	-3.3	0.6				
				Earthquake X Mode 2	52.3	-119.0	3.8	-102.1	2.9	0.7	57.0	183.3	-5.2	-59.1	3.7	0.9				
				Earthquake X Mode 3	-1.7	4.8	3.1	4.2	2.4	0.1	-1.8	-7.7	-4.5	2.4	3.7	0.4				
				Earthquake X Mode 4	3.0	-2.2	0.2	-0.4	0.1	-0.0	3.0	-0.8	-0.2	-0.2	0.2	0.0				
				Earthquake X Mode 5	-11.9	13.4	-0.0	2.2	-0.0	-0.0	-11.6	5.4	0.1	1.4	-0.0	-0.0				
				Earthquake X Mode 6	-0.1	-0.3	-0.1	-0.1	-0.1	-0.0	-0.1	-0.0	0.1	-0.0	-0.1	-0.0				
				Earthquake X Mode 7	-0.2	-0.9	0.3	-0.7	0.2	-0.0	-0.1	1.1	-0.4	-0.5	0.3	-0.0				
				Earthquake X Mode 8	-0.0	-1.3	-0.3	-1.0	-0.2	-0.0	0.0	1.6	0.4	-0.7	-0.3	-0.0				
				Earthquake X Mode 9	-0.4	-8.1	0.1	-6.1	0.1	0.0	-0.2	9.7	-0.2	-4.2	0.1	0.0				
				Earthquake Y Mode 1	-6.2	9.8	-1.3	8.6	-1.0	0.3	-6.6	-15.5	1.9	4.9	-1.5	0.3				
				Earthquake Y Mode 2	16.2	-36.8	1.2	-31.5	0.9	0.2	17.6	56.6	-1.6	-18.3	1.2	0.3				
				Earthquake Y Mode 3	-10.3	29.8	18.8	25.8	14.5	0.5	-11.2	-47.4	-27.8	15.0	22.9	2.4				
				Earthquake Y Mode 4	0.6	-0.4	0.0	-0.1	0.0	-0.0	0.6	-0.2	-0.0	-0.0	0.0	0.0				
				Earthquake Y Mode 5	-2.2	2.4	-0.0	0.4	-0.0	-0.0	-2.1	1.0	0.0	0.3	-0.0	-0.0				
				Earthquake Y Mode 6	-0.7	-2.4	-1.0	-0.6	-0.5	-0.0	-0.7	-0.2	0.8	-0.4	-0.8	-0.2				
				Earthquake Y Mode 7	-0.0	-0.3	0.1	-0.2	0.1	-0.0	-0.0	0.3	-0.1	-0.1	0.1	-0.0				
				Earthquake Y Mode 8	-0.0	-3.3	-0.7	-2.5	-0.6	-0.0	0.1	4.0	1.0	-1.7	-0.9	-0.1				
				Earthquake Y Mode 9	-0.1	-3.0	0.0	-2.2	0.0	0.0	-0.1	3.5	-0.1	-1.5	0.0	0.0				
					Floor 2	30.0	3.00/6.00	Self weight	200.4	-0.3	0.2	-0.9	0.1	0.0	175.9	3.0	-0.4	0.1	0.5	0.3
								Dead load	90.3	-0.8	0.9	-0.7	0.7	0.1	87.3	1.6	-1.4	-0.3	1.3	0.3
								Live load	51.6	-0.3	-0.1	-0.5	-0.1	0.0	49.9	1.4	0.0	-0.0	0.1	0.1
								Wind +X ecc.+	-7.4	13.1	-0.2	9.8	-0.1	-0.0	-7.7	-16.1	0.2	5.9	-0.1	0.0
								Wind +X ecc.-	-7.5	12.6	-0.4	9.5	-0.3	0.0	-7.8	-15.5	0.6	5.7	-0.4	0.0
								Wind -X ecc.+	7.4	-13.1	0.2	-9.8	0.1	0.0	7.7	16.1	-0.2	-5.9	0.1	-0.0
								Wind -X ecc.-	7.5	-12.6	0.4	-9.5	0.3	-0.0	7.8	15.5	-0.6	-5.7	0.4	-0.0
Wind +Y ecc.+	1.0	-1.1	2.8					-0.6	2.1	0.2	1.1	0.7	-3.9	-0.4	3.2	0.5				
Wind +Y ecc.-	1.4	1.1	3.9					1.1	3.0	0.1	1.3	-2.2	-5.6	0.6	4.6	0.4				
Wind -Y ecc.+	-1.0	1.1	-2.8					0.6	-2.1	-0.2	-1.1	-0.7	3.9	0.4	-3.2	-0.5				
Wind -Y ecc.-	-1.4	-1.1	-3.9					-1.1	-3.0	-0.1	-1.3	2.2	5.6	-0.6	-4.6	-0.4				
Earthquake X Mode 1	-24.9	29.8	-3.3					21.2	-2.5	0.7	-25.4	-33.1	4.7	12.6	-3.8	0.6				
Earthquake X Mode 2	95.6	-158.3	3.6					-112.2	2.8	0.7	99.0	175.8	-5.0	-67.2	3.6	0.9				
Earthquake X Mode 3	-1.4	5.9	3.5					4.4	2.6	0.1	-1.6	-7.2	-4.8	2.6	4.0	0.4				
Earthquake X Mode 4	2.2	1.3	-0.3					1.8	-0.3	0.0	2.0	-3.9	0.6	1.2	-0.4	0.1				
Earthquake X Mode 5	-7.8	-8.6	0.1					-11.9	0.0	0.0	-7.0	25.2	0.0	-7.6	-0.0	0.0				
Earthquake X Mode 6	-0.1	0.1	0.2					0.2	0.1	0.0	-0.1	-0.4	-0.3	0.1	0.2	0.0				
Earthquake X Mode 7	0.2	-0.5	0.1					-0.1	0.0	-0.0	0.2	-0.2	-0.0	-0.0	0.1	0.0				
Earthquake X Mode 8	0.0	-0.7	-0.1					-0.1	-0.0	-0.0	0.0	-0.3	0.0	-0.1	-0.1	-0.0				
Earthquake X Mode 9	0.9	-4.0	0.0					-0.4	0.0	0.0	0.8	-2.2	-0.0	-0.3	0.0	0.0				
Earthquake Y Mode 1	-11.3	13.5	-1.5					9.6	-1.1	0.3	-11.5	-15.0	2.1	5.7	-1.7	0.3				
Earthquake Y Mode 2	29.5	-48.9	1.1					-34.7	0.9	0.2	30.6	54.3	-1.6	-20.8	1.1	0.3				
Earthquake Y Mode 3	-8.8	36.2	21.4					26.8	16.0	0.5	-9.6	-44.6	-29.7	15.7	24.8	2.5				
Earthquake Y Mode 4	0.4	0.3	-0.1					0.4	-0.1	0.0	0.4	-0.8	0.1	0.2	-0.1	0.0				
Earthquake Y Mode 5	-1.4	-1.6	0.0					-2.2	0.0	0.0	-1.3	4.6	0.0	-1.4	-0.0	0.0				
Earthquake Y Mode 6	-0.5	1.0	1.4					1.6	1.2	0.0	-0.5	-3.6	-2.4	1.0	1.9	0.1				
Earthquake Y Mode 7	0.0	-0.1	0.0					-0.0	0.0	-0.0	0.0	-0.1	-0.0	-0.0	0.0	0.0				
Earthquake Y Mode 8	0.0	-1.7	-0.2					-0.2	-0.1	-0.0	0.0	-0.8	0.1	-0.1	-0.1	-0.0				
Earthquake Y Mode 9	0.3	-1.5	0.0					-0.2	0.0	0.0	0.3	-0.8	-0.0	-0.1	0.0	0.0				
	Floor 1	30.0	0.00/3.00					Self weight	250.5	1.5	0.3	0.3	0.2	0.0	225.0	1.2	-0.5	0.8	0.6	0.2
								Dead load	116.2	0.0	0.4	-0.2	0.4	0.0	112.5	1.0	-1.0	0.0	0.9	0.3
								Live load	66.6	0.7	0.1	0.1	0.0	0.0	64.6	0.5	-0.1	0.4	0.2	0.1
								Wind +X ecc.+	-11.8	21.9	-0.1	10.8	-0.1	-0.0	-11.8	-10.3	0.1	7.4	-0.1	0.0
								Wind +X ecc.-	-12.0	21.0	-0.3	10.4	-0.2	0.0	-12.0	-9.9	0.4	7.1	-0.3	0.0
								Wind -X ecc.+	11.8	-21.9	0.1	-10.8	0.1	0.0	11.8	10.3	-0.1	-7.4	0.1	-0.0
								Wind -X ecc.-	12.0	-21.0	0.3	-10.4	0.2	-0.0	12.0	9.9	-0.4	-7.1	0.3	-0.0
				Wind +Y ecc.+	3.3	-1.5	2.7	-0.6	1.8	0.1	3.3	0.3	-3.0	-0.5	2.7	0.4				
				Wind +Y ecc.-	4.2	2.4	4.0	1.4	2.6	0.0	4.1	-1.8	-4.5	0.9	3.9	0.4				
				Wind -Y ecc.+	-3.3	1.5	-2.7	0.6	-1.8	-0.1	-3.3	-0.3	3.0	0.5	-2.7	-0.4				
				Wind -Y ecc.-	-4.2	-2.4	-4.0	-1.4	-2.6	-0.0	-4.1	1.8	4.5	-0.9	-3.9	-0.4				
				Earthquake X Mode 1	-37.0	42.5	-3.2	20.1	-2.2	0.5	-36.7	-17.6	3.7	13.6	-3.1	0.3				
				Earthquake X Mode 2	141.2	-226.3	2.0	-107.3	1.6	0.4	140.8	95.5	-3.0	-72.6	2.0	0.5				
				Earthquake X Mode 3	-0.6	8.7	3.1	4.3	2.1	0.0	-0.6	-4.2	-3.4	2.8	3.1	0.3				
				Earthquake X Mode 4	0.4	5.0	-0.6	2.8	-0.4	0.1	0.4	-3.2	0.7	2.0	-0.6	0.0				
				Earthquake X Mode 5	-0.6	-32.6	-0.1	-18.2	-0.0	0.0	-0.1	21.0	-0.0	-12.6	-0.1	0.0				
				Earthquake X Mode 6	0.1	0.6	0.3	0.3	0.2	0.0	0.1	-0.4	-0.4	0.2	0.3	0.0				
				Earthquake X Mode 7	-0.1	1.1	-0.2	0.7	-0.2	0.0	-0.2	-1.0	0.3	0.5	-0.3	0.0				
				Earthquake X Mode 8	-0.1	1.6	0.3	1.1	0.2	0.0	-0.1	-1.5	-0.3	0.8	0.3	0.0				
				Earthquake X Mode 9	-0.6	9.8	-0.1	6.5	-0.1	-0.0	-0.8	-8.8	0.1	4.6	-0.1	-0.0				
				Earthquake Y Mode 1	-16.8	19.3	-1.4	9.1	-1.0	0.2	-16.6	-8.0	1.7	6.2	-1.4	0.1				
				Earthquake Y Mode 2	43.6	-69.9	0.6	-33.2	0.5	0.1	43.5	29.5	-0.9	-22.4	0.6	0.2				
				Earthquake Y Mode 3	-3.5	53.3	19.1	26.3	12.6	0.2	-3.9	-25.9	-21.1	17.3	18.8	1.9				
				Earthquake Y Mode 4	0.1	1.0	-0.1	0.5	-0.1	0.0	0.1	-0.6	0.1	0.4	-0.1	0.0				
				Earthquake Y Mode 5	-0.1	-5.9	-0.0	-3.3	-0.0	0.0	-0.0	3.8	-0.0	-2.3	-0.0	0.0				
				Earthquake Y Mode 6	0.8	5.1	2.5	2.9	1.7	0.0	0.7	-3.3	-3.0	1.9	2.6	0.2				
				Earthquake Y Mode 7	-0.0	0.3	-0.1	0.2	-0.1	0.0	-0.0	-0.3	0.1	0.2	-0.1	0.0				
				Earthquake Y Mode 8	-0.1	4.0	0.6	2.7	0.5	0.0	-0.2	-3.6	-0.8	1.9	0.7	0.0				
				Earthquake Y Mode 9	-0.2	3.6	-0.0	2.4	-0.0	-0.0	-0.3	-3.2	0.0	1.7	-0.0	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
W47	techo	30.0	12.00/15.00	Self weight	55.0	-11.2	-2.2	-8.2	-4.0	0.1	32.0	14.8	8.9	-12.2	-2.5	0.5
				Dead load	64.6	-4.6	7.6	-5.5	6.6	0.0	59.8	13.0	-12.0	-9.0	4.5	0.4
				Live load	7.5	-5.7	-2.7	-3.8	-1.8	0.0	6.7	6.1	2.3	-5.4	-1.2	0.2
				Wind +X ecc.+	3.4	0.5	0.1	0.6	0.1	-0.0	3.2	-1.3	-0.1	0.9	0.1	-0.0
				Wind +X ecc.-	3.3	0.4	0.2	0.5	0.6	0.0	3.2	-1.3	-1.5	0.9	0.3	-0.0
				Wind -X ecc.+	-3.4	-0.5	-0.1	-0.6	-0.1	0.0	-3.2	1.3	0.1	-0.9	-0.1	0.0
				Wind -X ecc.-	-3.3	-0.4	-0.2	-0.5	-0.6	-0.0	-3.2	1.3	1.5	-0.9	-0.3	0.0
				Wind +Y ecc.+	-1.8	-0.3	1.5	-0.2	5.3	0.0	-0.9	0.3	-13.9	-0.2	2.5	0.0
				Wind +Y ecc.-	-1.2	-0.2	0.8	-0.1	2.9	-0.1	-0.7	0.2	-7.7	-0.2	1.3	-0.1
				Wind -Y ecc.+	1.8	0.3	-1.5	0.2	-5.3	-0.0	0.9	-0.3	13.9	0.2	-2.5	-0.0
				Wind -Y ecc.-	1.2	0.2	-0.8	0.1	-2.9	0.1	0.7	-0.2	7.7	0.2	-1.3	0.1
				Earthquake X Mode 1	5.7	0.8	8.4	1.4	17.4	0.4	7.7	-4.0	-42.0	2.7	8.8	0.3
				Earthquake X Mode 2	-51.6	-7.2	8.0	-8.2	16.9	0.2	-46.1	19.1	-40.6	-13.3	7.6	0.8
				Earthquake X Mode 3	-0.2	0.0	1.2	0.1	3.3	-0.1	0.3	-0.4	-8.5	0.3	1.6	-0.1
				Earthquake X Mode 4	1.4	-0.3	-5.7	-0.3	-5.2	-0.1	0.8	0.8	9.3	-0.6	-3.1	-0.1
				Earthquake X Mode 5	9.0	1.6	-5.7	1.6	-5.1	-0.1	7.9	-3.4	8.8	2.5	-2.8	-0.2
				Earthquake X Mode 6	0.8	-0.0	-1.4	-0.0	-1.3	0.0	0.6	0.0	2.4	-0.0	-0.8	0.0
				Earthquake X Mode 7	-0.5	0.1	2.2	0.1	1.4	0.0	-0.3	-0.2	-1.8	0.1	0.9	0.0
				Earthquake X Mode 8	-1.1	0.1	3.5	0.1	2.2	-0.0	-0.9	-0.1	-2.8	0.1	1.4	-0.0
				Earthquake X Mode 9	2.6	0.5	-4.9	0.4	-3.0	-0.0	2.2	-0.8	3.6	0.6	-1.9	-0.0
				Earthquake Y Mode 1	2.6	0.4	3.8	0.7	7.9	0.2	3.5	-1.8	-19.0	1.2	4.0	0.1
				Earthquake Y Mode 2	-15.9	-2.2	2.5	-2.5	5.2	0.1	-14.2	5.9	-12.5	-4.1	2.3	0.3
				Earthquake Y Mode 3	-1.1	0.2	7.1	0.7	20.3	-0.4	1.9	-2.2	-52.0	1.6	9.6	-0.6
				Earthquake Y Mode 4	0.3	-0.1	-1.1	-0.1	-1.0	-0.0	0.2	0.2	1.8	-0.1	-0.6	-0.0
				Earthquake Y Mode 5	1.6	0.3	-1.0	0.3	-0.9	-0.0	1.4	-0.6	1.6	0.4	-0.5	-0.0
				Earthquake Y Mode 6	6.5	-0.1	-11.9	-0.1	-11.1	0.1	4.9	0.3	20.1	-0.3	-6.3	0.1
				Earthquake Y Mode 7	-0.1	0.0	0.7	0.0	0.4	0.0	-0.1	-0.1	-0.5	0.0	0.3	0.0
				Earthquake Y Mode 8	-2.7	0.2	8.8	0.2	5.5	-0.0	-2.1	-0.3	-7.0	0.3	3.6	-0.0
				Earthquake Y Mode 9	0.9	0.2	-1.8	0.2	-1.1	-0.0	0.8	-0.3	1.3	0.2	-0.7	-0.0
	Floor 4	30.0	9.00/12.00	Self weight	117.4	-11.7	-3.0	-9.0	-1.5	0.2	97.0	15.8	3.1	-10.8	-2.6	-0.2
				Dead load	85.5	-0.7	4.5	-0.1	2.6	-0.0	83.8	-0.7	-2.4	0.6	0.9	-0.0
				Live load	26.8	-7.0	-2.3	-5.5	-1.5	0.1	26.6	9.7	2.8	-6.7	-1.7	-0.1
				Wind +X ecc.+	3.5	0.2	0.1	0.2	0.0	0.0	3.4	-0.4	0.0	0.2	-0.0	0.0
				Wind +X ecc.-	2.9	0.2	0.7	0.2	0.9	0.0	2.8	-0.3	-2.1	0.2	0.5	0.0
				Wind -X ecc.+	-3.5	-0.2	-0.1	-0.2	-0.0	-0.0	-3.4	0.4	-0.0	-0.2	0.0	-0.0
				Wind -X ecc.-	-2.9	-0.2	-0.7	-0.2	-0.9	-0.0	-2.8	0.3	2.1	-0.2	-0.5	-0.0
				Wind +Y ecc.+	-7.2	-0.3	6.0	-0.2	9.3	-0.0	-7.6	0.4	-22.2	-0.3	4.9	0.0
				Wind +Y ecc.-	-4.4	-0.2	3.3	-0.1	5.3	-0.1	-4.6	0.2	-12.6	-0.2	2.7	-0.1
				Wind -Y ecc.+	7.2	0.3	-6.0	0.2	-9.3	0.0	7.6	-0.4	22.2	0.3	-4.9	-0.0
				Wind -Y ecc.-	4.4	0.2	-3.3	0.1	-5.3	0.1	4.6	-0.2	12.6	0.2	-2.7	0.1
				Earthquake X Mode 1	-10.1	-0.0	21.7	0.1	26.4	0.3	-10.9	-0.2	-58.0	-0.0	14.2	0.6
				Earthquake X Mode 2	-69.1	-4.2	21.6	-3.3	26.6	0.1	-68.9	5.8	-59.2	-3.6	14.8	0.3
				Earthquake X Mode 3	-3.7	-0.1	4.5	-0.1	5.9	-0.1	-3.9	0.1	-13.1	-0.1	3.1	-0.1
				Earthquake X Mode 4	4.8	-0.2	-8.1	-0.1	-4.2	-0.0	4.5	-0.0	4.7	-0.0	-2.7	-0.1
				Earthquake X Mode 5	12.6	1.1	-8.4	0.5	-4.3	-0.0	12.1	-0.5	4.6	0.4	-2.8	-0.0
				Earthquake X Mode 6	1.8	0.0	-2.3	0.0	-1.3	0.0	1.7	-0.0	1.5	0.0	-0.8	0.0
				Earthquake X Mode 7	-0.7	0.0	0.7	-0.0	-0.3	-0.0	-0.5	0.1	1.5	-0.0	-0.2	-0.0
				Earthquake X Mode 8	-1.4	0.0	1.3	-0.0	-0.4	-0.0	-1.2	0.1	2.3	-0.0	-0.2	-0.0
				Earthquake X Mode 9	3.0	0.1	-1.7	-0.1	0.7	0.0	2.6	0.4	-3.4	-0.2	0.4	0.0
				Earthquake Y Mode 1	-4.6	-0.0	9.8	0.0	12.0	0.1	-5.0	-0.1	-26.3	-0.0	6.4	0.3
				Earthquake Y Mode 2	-21.4	-1.3	6.7	-1.0	8.2	0.0	-21.3	1.8	-18.3	-1.1	4.6	0.1
				Earthquake Y Mode 3	-22.8	-0.5	27.9	-0.3	36.1	-0.8	-24.0	0.6	-80.6	-0.4	19.4	-0.6
				Earthquake Y Mode 4	0.9	-0.0	-1.6	-0.0	-0.8	-0.0	0.9	-0.0	0.9	-0.0	-0.5	-0.0
				Earthquake Y Mode 5	2.3	0.2	-1.5	0.1	-0.8	-0.0	2.2	-0.1	0.8	0.1	-0.5	-0.0
				Earthquake Y Mode 6	14.6	0.0	-19.2	0.0	-10.4	0.1	13.9	-0.2	12.1	0.1	-6.7	0.1
				Earthquake Y Mode 7	-0.2	0.0	0.2	-0.0	-0.1	-0.0	-0.1	0.0	0.5	-0.0	-0.1	-0.0
				Earthquake Y Mode 8	-3.6	0.0	3.3	-0.0	-0.9	-0.0	-2.9	0.2	5.7	-0.1	-0.5	-0.0
				Earthquake Y Mode 9	1.1	0.0	-0.6	-0.0	0.2	0.0	0.9	0.1	-1.2	-0.1	0.1	0.0
	Floor 3	30.0	6.00/9.00	Self weight	176.6	-11.0	-2.8	-8.4	-1.3	0.2	156.0	14.6	3.3	-9.9	-2.3	-0.2
				Dead load	108.1	-1.5	4.3	-1.3	3.1	0.0	106.0	2.4	-3.6	-1.7	1.2	-0.1
				Live load	45.9	-6.5	-2.3	-5.0	-1.3	0.1	45.7	8.7	2.3	-5.9	-1.5	-0.1
				Wind +X ecc.+	3.7	0.4	0.2	0.4	0.1	-0.0	3.6	-0.8	-0.2	0.5	0.0	0.0
				Wind +X ecc.-	2.0	0.4	1.5	0.4	1.5	0.0	1.9	-0.7	-2.9	0.5	0.8	0.0
				Wind -X ecc.+	-3.7	-0.4	-0.2	-0.4	-0.1	0.0	-3.6	0.8	0.2	-0.5	-0.0	-0.0
				Wind -X ecc.-	-2.0	-0.4	-1.5	-0.4	-1.5	-0.0	-1.9	0.7	2.9	-0.5	-0.8	-0.0
				Wind +Y ecc.+	-18.1	-0.3	13.6	-0.2	14.2	-0.1	-18.2	0.4	-29.3	-0.3	8.0	0.0
				Wind +Y ecc.-	-10.6	-0.2	7.6	-0.1	8.0	-0.2	-10.7	0.2	-16.6	-0.2	4.5	-0.1
				Wind -Y ecc.+	18.1	0.3	-13.6	0.2	-14.2	0.1	18.2	-0.4	29.3	0.3	-8.0	-0.0
				Wind -Y ecc.-	10.6	0.2	-7.6	0.1	-8.0	0.2	10.7	-0.2	16.6	0.2	-4.5	0.1
				Earthquake X Mode 1	-36.7	0.8	40.6	0.7	36.4	0.4	-36.7	-1.4	-69.4	1.0	20.8	0.7
				Earthquake X Mode 2	-98.8	-6.6	39.0	-5.4	34.9	0.1	-97.5	9.9	-67.2	-6.8	20.5	0.3
				Earthquake X Mode 3	-10.0	0.0	8.7	0.0	8.0	-0.2	-10.0	-0.0	-15.6	0.0	4.6	-0.1
				Earthquake X Mode 4	6.1	-0.2	-5.3	-0.0	-0.6	-0.0	5.4	-0.1	-3.0	0.0	-0.5	-0.0
				Earthquake X Mode 5	14.0	0.7	-5.6	0.2	-0.6	0.0	13.2	0.2	-3.5	0.0	-0.6	-0.0
				Earthquake X Mode 6	2.2	-0.0	-1.6	0.0	-0.2	0.0	2.0	-0.0	-0.8	0.0	-0.2	0.0
				Earthquake X Mode 7	0.0	-0.1	-1.9	-0.1	-1.4	-0.0	0.1	0.1	2.1	-0.1	-0.9	-0.0
				Earthquake X Mode 8	-0.3	-0.1	-3.0	-0.0	-2.3	0.0	-0.2	0.1	3.6	-0.1	-1.5	0.0
				Earthquake X Mode 9	1.4	-0.4	4.1	-0.2	3.0	0.0	1.2	0.4	-4.7	-0.3	2.1	0.0
				Earthquake Y Mode 1	-16.7	0.4	18.4	0.3	16.5	0.2	-16.6	-0.6	-31.5	0.4	9.4	0.3
				Earthquake Y Mode 2	-30.5	-2.0	12.1	-1.7	10.8	0.0	-30.1	3.1	-20.8	-2.1	6.3	0.1



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	30.0	3.00/6.00	Self weight	233.4	-11.5	-2.2	-8.6	-0.7	0.2	212.6	14.6	2.6	-10.1	-1.7	-0.2
				Dead load	130.9	-1.4	4.5	-1.1	3.1	0.0	128.8	1.7	-3.1	-1.2	1.3	-0.1
				Live load	63.7	-6.9	-2.2	-5.2	-1.0	0.1	63.4	8.8	1.9	-6.1	-1.3	-0.1
				Wind +X ecc.+	3.8	0.6	0.2	0.4	0.1	-0.0	3.7	-0.7	-0.2	0.5	0.0	0.0
				Wind +X ecc.-	0.8	0.6	2.6	0.4	1.9	0.0	0.8	-0.7	-3.1	0.5	1.1	0.0
				Wind -X ecc.+	-3.8	-0.6	-0.2	-0.4	-0.1	0.0	-3.7	0.7	0.2	-0.5	-0.0	-0.0
				Wind -X ecc.-	-0.8	-0.6	-2.6	-0.4	-1.9	-0.0	-0.8	0.7	3.1	-0.5	-1.1	-0.0
				Wind +Y ecc.+	-33.7	-0.2	25.0	-0.2	18.6	-0.1	-33.2	0.3	-31.2	-0.2	11.2	0.0
				Wind +Y ecc.-	-19.8	-0.1	13.8	-0.1	10.5	-0.2	-19.5	0.2	-18.0	-0.1	6.3	-0.2
				Wind -Y ecc.+	33.7	0.2	-25.0	0.2	-18.6	0.1	33.2	-0.3	31.2	0.2	-11.2	-0.0
				Wind -Y ecc.-	19.8	0.1	-13.8	0.1	-10.5	0.2	19.5	-0.2	18.0	0.1	-6.3	0.2
				Earthquake X Mode 1	-70.8	1.4	62.4	0.9	41.8	0.4	-69.1	-1.2	-64.2	0.9	25.4	0.7
				Earthquake X Mode 2	-136.2	-7.5	60.3	-5.2	39.9	0.1	-133.2	8.2	-61.5	-6.0	25.1	0.3
				Earthquake X Mode 3	-18.2	0.1	13.5	0.0	9.4	-0.2	-17.9	-0.0	-14.9	0.0	5.7	-0.2
				Earthquake X Mode 4	4.1	0.1	2.2	0.1	3.8	0.0	3.6	-0.3	-8.9	0.2	2.4	0.1
				Earthquake X Mode 5	11.7	-0.3	2.0	-0.4	3.8	0.0	11.2	1.1	-9.0	-0.8	2.4	0.0
				Earthquake X Mode 6	1.6	0.0	0.5	0.0	1.1	-0.0	1.5	-0.0	-2.6	0.0	0.7	-0.0
				Earthquake X Mode 7	0.4	-0.0	-1.0	-0.0	-0.0	-0.0	0.3	-0.0	-0.8	0.0	-0.1	-0.0
				Earthquake X Mode 8	0.5	-0.0	-1.9	-0.0	-0.2	0.0	0.2	-0.0	-1.1	0.0	-0.2	0.0
				Earthquake X Mode 9	0.4	-0.2	2.5	-0.0	0.2	-0.0	0.7	-0.1	1.8	0.0	0.2	-0.0
				Earthquake Y Mode 1	-32.1	0.6	28.3	0.4	19.0	0.2	-31.4	-0.6	-29.1	0.4	11.5	0.3
				Earthquake Y Mode 2	-42.1	-2.3	18.6	-1.6	12.3	0.0	-41.2	2.5	-19.0	-1.9	7.8	0.1
				Earthquake Y Mode 3	-112.3	0.6	83.2	0.3	57.6	-1.1	-109.9	-0.3	-91.5	0.3	34.8	-0.9
				Earthquake Y Mode 4	0.8	0.0	0.4	0.0	0.7	0.0	0.7	-0.1	-1.7	0.0	0.5	0.0
				Earthquake Y Mode 5	2.1	-0.1	0.4	-0.1	0.7	0.0	2.0	0.2	-1.6	-0.1	0.4	0.0
				Earthquake Y Mode 6	13.4	0.1	4.0	0.1	8.7	-0.1	12.1	-0.2	-21.2	0.1	5.4	-0.0
				Earthquake Y Mode 7	0.1	-0.0	-0.3	-0.0	-0.0	-0.0	0.1	-0.0	-0.2	0.0	-0.0	-0.0
				Earthquake Y Mode 8	1.1	-0.1	-4.8	-0.0	-0.6	0.0	0.6	-0.1	-2.8	0.0	-0.5	0.0
				Earthquake Y Mode 9	0.1	-0.1	0.9	-0.0	0.1	-0.0	0.3	-0.1	0.7	0.0	0.1	-0.0
	Floor 1	30.0	0.00/3.00	Self weight	284.7	-4.9	1.0	-5.3	-0.3	0.2	264.0	11.1	5.3	-6.1	-1.0	-0.2
				Dead load	154.0	-0.7	3.2	-0.7	2.2	0.0	151.8	1.5	-1.7	-0.8	0.7	-0.1
				Live load	78.5	-3.0	0.1	-3.2	-0.7	0.1	78.2	6.7	3.3	-3.7	-0.7	-0.1
				Wind +X ecc.+	4.0	1.0	-0.0	0.5	0.1	-0.0	3.9	-0.4	-0.2	0.5	-0.0	0.0
				Wind +X ecc.-	-0.5	1.0	4.7	0.5	2.1	0.0	-0.4	-0.4	-1.7	0.5	1.4	0.0
				Wind -X ecc.+	-4.0	-1.0	0.0	-0.5	-0.1	0.0	-3.9	0.4	0.2	-0.5	0.0	-0.0
				Wind -X ecc.-	0.5	-1.0	-4.7	-0.5	-2.1	-0.0	0.4	0.4	1.7	-0.5	-1.4	-0.0
				Wind +Y ecc.+	-51.0	-0.0	55.4	-0.1	24.7	-0.1	-49.1	0.2	-18.7	-0.1	17.7	0.0
				Wind +Y ecc.-	-30.4	-0.1	33.6	-0.1	15.2	-0.2	-29.3	0.1	-11.9	-0.1	10.9	-0.1
				Wind -Y ecc.+	51.0	0.0	-55.4	0.1	-24.7	0.1	49.1	-0.2	18.7	0.1	-17.7	-0.0
				Wind -Y ecc.-	30.4	0.1	-33.6	0.1	-15.2	0.2	29.3	-0.1	11.9	0.1	-10.9	0.1
				Earthquake X Mode 1	-103.3	2.8	104.0	1.2	43.6	0.2	-98.8	-0.7	-27.7	1.0	30.8	0.5
				Earthquake X Mode 2	-172.0	-9.7	108.2	-4.7	44.6	0.0	-166.4	4.2	-26.9	-4.6	32.6	0.2
				Earthquake X Mode 3	-26.7	0.2	26.5	0.1	11.5	-0.1	-25.7	-0.0	-7.9	0.1	8.2	-0.1
				Earthquake X Mode 4	0.4	0.4	11.6	0.2	6.0	0.0	0.5	-0.2	-6.1	0.2	4.3	0.1
				Earthquake X Mode 5	7.5	-1.4	12.5	-0.7	6.4	0.0	7.7	0.9	-6.1	-0.9	4.6	0.0
Earthquake X Mode 6				0.5	0.0	3.6	0.0	1.9	-0.0	0.5	-0.0	-2.0	0.0	1.4	-0.0	
Earthquake X Mode 7				-0.1	0.1	2.4	0.1	1.5	0.0	-0.2	-0.1	-2.0	0.1	1.1	0.0	
Earthquake X Mode 8				-0.3	0.1	4.0	0.0	2.5	-0.0	-0.5	-0.1	-3.4	0.1	1.8	0.0	
Earthquake X Mode 9				1.4	0.4	-5.4	0.3	-3.4	-0.0	1.6	-0.4	4.5	0.4	-2.5	-0.0	
Earthquake Y Mode 1				-46.9	1.3	47.2	0.5	19.8	0.1	-44.8	-0.3	-12.6	0.5	14.0	0.2	
Earthquake Y Mode 2				-53.1	-3.0	33.4	-1.5	13.8	0.0	-51.4	1.3	-8.3	-1.4	10.1	0.1	
Earthquake Y Mode 3				-164.4	1.4	163.2	0.5	70.6	-0.9	-158.0	-0.2	-48.9	0.4	50.3	-0.6	
Earthquake Y Mode 4				0.1	0.1	2.2	0.0	1.2	0.0	0.1	-0.0	-1.2	0.0	0.8	0.0	
Earthquake Y Mode 5				1.4	-0.3	2.3	-0.1	1.2	0.0	1.4	0.2	-1.1	-0.2	0.8	0.0	
Earthquake Y Mode 6				3.8	0.2	29.9	0.1	15.7	-0.1	4.0	-0.1	-16.2	0.1	11.2	-0.0	
Earthquake Y Mode 7	-0.0	0.0	0.7	0.0	0.5	0.0	-0.1	-0.0	-0.6	0.0	0.3	0.0				
Earthquake Y Mode 8	-0.8	0.2	9.9	0.1	6.4	-0.0	-1.2	-0.2	-8.5	0.2	4.6	0.0				
Earthquake Y Mode 9	0.5	0.2	-2.0	0.1	-1.2	-0.0	0.6	-0.2	1.6	0.1	-0.9	-0.0				
W49	techo	30.0	12.00/15.00	Self weight	68.8	-12.5	-5.7	-9.4	-6.3	-0.1	45.5	17.2	13.4	-13.8	-4.0	0.2
				Dead load	60.0	-4.9	1.6	-5.6	1.9	-0.0	55.2	12.9	-3.2	-8.8	1.3	0.2
				Live load	6.6	-6.4	-4.3	-4.2	-3.9	-0.0	6.3	6.8	7.3	-5.9	-2.5	0.1
				Wind +X ecc.+	3.6	0.5	-0.2	0.6	-0.2	-0.0	3.4	-1.4	0.5	1.0	-0.2	-0.0
				Wind +X ecc.-	3.6	0.5	-0.1	0.6	0.3	0.0	3.3	-1.4	-0.9	1.0	0.1	-0.0
				Wind -X ecc.+	-3.6	-0.5	0.2	-0.6	0.2	0.0	-3.4	1.4	-0.5	-1.0	0.2	0.0
				Wind -X ecc.-	-3.6	-0.5	0.1	-0.6	-0.3	-0.0	-3.3	1.4	0.9	-1.0	-0.1	0.0
				Wind +Y ecc.+	0.9	0.1	1.2	-0.0	5.2	0.0	0.1	0.1	-14.0	-0.0	2.6	0.0
				Wind +Y ecc.-	0.9	0.1	0.5	0.0	2.8	-0.1	0.4	-0.1	-7.7	0.1	1.4	-0.1
				Wind -Y ecc.+	-0.9	-0.1	-1.2	0.0	-5.2	-0.0	-0.1	-0.1	14.0	0.0	-2.6	-0.0
				Wind -Y ecc.-	-0.9	-0.1	-0.5	-0.0	-2.8	0.1	-0.4	0.1	7.7	-0.1	-1.4	0.1
				Earthquake X Mode 1	14.7	1.6	6.6	1.7	16.1	0.4	11.7	-3.8	-40.3	2.7	8.5	0.4
				Earthquake X Mode 2	-42.4	-7.0	11.5	-8.5	20.8	0.2	-42.8	20.3	-50.0	-13.9	11.7	0.6
				Earthquake X Mode 3	2.8	0.3	0.8	0.3	3.1	-0.1	2.2	-0.7	-8.2	0.5	1.5	-0.1
				Earthquake X Mode 4	-4.1	-0.3	-5.5	-0.3	-5.0	-0.1	-3.4	0.6	9.0	-0.4	-3.1	-0.1
				Earthquake X Mode 5	2.9	1.7	-6.8	1.7	-6.1	-0.1	3.4	-3.8	11.0	2.7	-3.8	-0.1
				Earthquake X Mode 6	-1.0	-0.0	-1.4	-0.0	-1.3	0.0	-0.8	0.1	2.4	-0.1	-0.8	0.0
				Earthquake X Mode 7	0.9	0.1	2.2	0.1	1.4	0.0	0.7	-0.1	-1.7	0.1	0.9	0.0
				Earthquake X Mode 8	1.5	0.1	3.6	0.1	2.2	-0.0	1.2	-0.1	-2.8	0.1	1.5	-0.0
				Earthquake X Mode 9	-0.8	0.6	-5.2	0.5	-3.3	-0.0	-0.5	-0.9	4.2	0.7	-2.2	-0.0
				Earthquake Y Mode 1	6.7	0.7	3.0	0.8	7.3	0.2	5.3	-1.7	-18.3	1.2	3.9	0.2
				Earthquake Y Mode 2	-13.1	-2.2	3.5	-2.6	6.4	0.1	-13.2	6.3	-15.4	-4.3	3.6	0.2
Earthquake Y Mode 3	17.2	2.0	4.8	2.0	18.8	-0.5	13.4	-4.4	-50.4	3.2	9.4	-0.6				
Earthquake Y Mode 4	-0.8	-0.1	-1.1	-0.1	-1.0	-0.0	-0.7	0.1	1.7	-0.1	-0.6	-0.0				
Earthquake Y Mode 5	0.5	0.3	-1.2	0.3	-1.1	-0.0	0.6	-0.7	2.0	0.5	-0.7	-0.0				
Earthquake Y Mode 6	-8.4	-0.3	-11.7	-0.2	-10.9	0.1	-6.7	0.5	20.0	-0.4	-6.6	0.1				
Earthquake Y Mode 7	0.3	0.0	0.7	0.0	0.4	0.0	0.2	-0.0	-0.5	0.0	0.3	0.0				
Earthquake Y Mode 8	3.7	0.2	8.9	0.2	5.5	-0.0	3.1	-0.3	-6.9	0.3	3.7	-0.0				
Earthquake Y Mode 9	-0.3	0.2	-1.9	0.2	-1.2	-0.0	-0.2	-0.3	1.5	0.3	-0.8	-0.0				



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head										
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)					
	Floor 4	30.0	9.00/12.00	Self weight	128.7	-12.8	-6.8	-9.8	-5.2	-0.1	108.0	16.8	9.3	-11.3	-2.4	-0.7					
				Dead load	88.6	-1.0	-2.5	-0.3	-3.4	-0.0	86.4	-0.2	8.1	0.3	-2.5	-0.0	-0.1				
				Live load	27.2	-7.8	-2.3	-6.1	-1.3	-0.1	26.9	10.7	1.7	-7.3	-0.3	-0.5	-0.1				
				Wind +X ecc.+	3.6	0.2	-0.3	0.2	-0.3	-0.0	3.5	-0.4	0.5	0.2	-0.1	0.0	0.0	0.0			
				Wind +X ecc.-	4.1	0.2	0.2	0.2	0.6	0.0	3.9	-0.4	-1.6	0.2	0.3	0.0	0.0	0.0			
				Wind -X ecc.+	-3.6	-0.2	0.3	-0.2	0.3	0.0	-3.5	0.4	-0.5	-0.2	0.1	-0.0	0.0	0.0			
				Wind -X ecc.-	-4.1	-0.2	-0.2	-0.2	-0.6	-0.0	-3.9	0.4	1.6	-0.2	-0.3	-0.0	0.0	0.0			
				Wind +Y ecc.+	6.8	0.2	5.7	0.2	9.2	-0.1	5.2	-0.2	-21.7	0.0	4.3	0.1	0.0	0.0			
				Wind +Y ecc.-	4.3	0.1	3.1	0.1	5.2	-0.1	3.3	-0.2	-12.3	0.0	2.4	-0.1	0.0	0.0			
				Wind -Y ecc.+	-6.8	-0.2	-5.7	-0.2	-9.2	0.1	-5.2	0.2	21.7	-0.0	-4.3	-0.1	0.0	0.0			
				Wind -Y ecc.-	-4.3	-0.1	-3.1	-0.1	-5.2	0.1	-3.3	0.2	12.3	-0.0	-2.4	0.1	0.0	0.0			
				Earthquake X Mode 1	31.9	1.2	19.8	1.0	25.4	0.3	27.3	-1.5	-55.4	0.6	12.3	0.7	0.0	0.0			
				Earthquake X Mode 2	-24.5	-3.1	26.2	-2.5	30.2	0.1	-28.5	4.5	-64.0	-3.0	14.8	0.2	0.0	0.0			
				Earthquake X Mode 3	6.6	0.2	4.2	0.2	5.7	-0.1	5.6	-0.3	-12.5	0.1	2.7	-0.1	0.0	0.0			
				Earthquake X Mode 4	-7.7	-0.2	-8.2	-0.1	-4.1	-0.0	-7.2	0.1	4.2	-0.0	-2.4	-0.1	0.0	0.0			
				Earthquake X Mode 5	-0.7	1.0	-9.2	0.5	-4.8	-0.0	-0.3	-0.4	5.2	0.4	-2.7	-0.0	0.0	0.0			
				Earthquake X Mode 6	-2.1	-0.0	-2.4	-0.0	-1.3	0.0	-1.9	0.0	1.3	0.0	-0.7	0.0	0.0	0.0			
				Earthquake X Mode 7	1.1	0.0	0.7	-0.0	-0.3	-0.0	1.1	0.0	1.6	-0.0	-0.2	-0.0	0.0	0.0			
				Earthquake X Mode 8	1.9	0.0	1.4	-0.0	-0.4	-0.0	1.9	0.1	2.4	-0.0	-0.2	-0.0	0.0	0.0			
				Earthquake X Mode 9	-1.2	0.1	-1.6	-0.1	0.7	0.0	-1.4	0.4	-3.5	-0.2	0.5	0.0	0.0	0.0			
				Earthquake Y Mode 1	14.5	0.5	9.0	0.4	11.5	0.1	12.4	-0.7	-25.1	0.3	5.6	0.3	0.0	0.0			
				Earthquake Y Mode 2	-7.6	-1.0	8.1	-0.8	9.3	0.0	-8.8	1.4	-19.8	-0.9	4.6	0.1	0.0	0.0			
				Earthquake Y Mode 3	40.9	1.5	25.7	1.2	34.8	-0.9	34.5	-2.0	-77.2	0.8	16.9	-0.5	-0.1	0.0			
				Earthquake Y Mode 4	-1.5	-0.0	-1.6	-0.0	-0.8	-0.0	-1.4	0.0	0.8	-0.0	-0.5	-0.0	0.0	0.0			
				Earthquake Y Mode 5	-0.1	0.2	-1.7	0.1	-0.9	-0.0	-0.0	-0.1	1.0	0.1	-0.5	-0.0	0.0	0.0			
				Earthquake Y Mode 6	-16.9	-0.2	-19.5	-0.1	-10.3	0.1	-15.7	0.1	11.1	0.0	-5.9	0.1	0.0	0.0			
				Earthquake Y Mode 7	0.3	0.0	0.2	-0.0	-0.1	-0.0	0.3	0.0	0.5	-0.0	-0.1	-0.0	0.0	0.0			
				Earthquake Y Mode 8	4.6	0.1	3.6	-0.0	-0.9	-0.0	4.8	0.1	6.0	-0.1	-0.6	-0.0	0.0	0.0			
				Earthquake Y Mode 9	-0.5	0.0	-0.6	-0.0	0.3	0.0	-0.5	0.1	-1.3	-0.1	0.2	0.0	0.0	0.0			
					Floor 3	30.0	6.00/9.00	Self weight	189.2	-12.1	-5.2	-9.3	-3.3	-0.1	167.6	16.0	5.8	-10.7	-1.4	-0.7	
								Dead load	115.0	-1.7	-2.3	-1.4	-2.4	0.0	112.5	2.6	5.8	-1.7	-1.6	-0.1	-0.1
								Live load	48.2	-7.2	-2.4	-5.5	-1.5	-0.1	47.7	9.5	2.2	-6.3	-0.6	-0.4	-0.1
								Wind +X ecc.+	3.7	0.5	-0.4	0.4	-0.4	-0.0	3.7	-0.8	0.7	0.5	-0.2	0.0	0.0
Wind +X ecc.-	5.3	0.5	0.9					0.4	1.0	0.0	5.0	-0.8	-2.0	0.5	0.5	0.1	0.0	0.0			
Wind -X ecc.+	-3.7	-0.5	0.4					-0.4	0.4	0.0	-3.7	0.8	-0.7	-0.5	0.2	-0.0	0.0	0.0			
Wind -X ecc.-	-5.3	-0.5	-0.9					-0.4	-1.0	-0.0	-5.0	0.8	2.0	-0.5	-0.5	-0.1	0.0	0.0			
Wind +Y ecc.+	18.3	0.1	13.4					0.1	14.1	-0.1	15.9	-0.0	-28.3	-0.2	7.0	0.1	0.0	0.0			
Wind +Y ecc.-	10.9	0.1	7.4					0.1	7.9	-0.2	9.6	-0.1	-16.0	-0.0	3.9	-0.1	0.0	0.0			
Wind -Y ecc.+	-18.3	-0.1	-13.4					-0.1	-14.1	0.1	-15.9	0.0	28.3	0.2	-7.0	-0.1	0.0	0.0			
Wind -Y ecc.-	-10.9	-0.1	-7.4					-0.1	-7.9	0.2	-9.6	0.1	16.0	0.0	-3.9	0.1	0.0	0.0			
Earthquake X Mode 1	60.7	1.6	38.7					1.3	34.9	0.3	54.9	-2.1	-64.6	0.9	17.6	0.9	0.0	0.0			
Earthquake X Mode 2	3.3	-6.2	46.0					-5.0	40.5	0.1	-2.0	9.6	-74.8	-6.9	20.5	0.1	0.0	0.0			
Earthquake X Mode 3	13.4	0.3	8.4					0.2	7.8	-0.2	12.1	-0.4	-14.6	0.2	3.9	-0.1	0.0	0.0			
Earthquake X Mode 4	-9.1	-0.1	-5.5					-0.1	-0.6	-0.0	-9.1	-0.0	-3.4	0.0	-0.4	-0.0	0.0	0.0			
Earthquake X Mode 5	-2.0	0.7	-5.8					0.2	-0.6	0.0	-2.1	0.2	-3.5	0.0	-0.4	-0.0	0.0	0.0			
Earthquake X Mode 6	-2.5	-0.0	-1.7					-0.0	-0.2	0.0	-2.5	0.0	-0.9	0.0	-0.1	0.0	0.0	0.0			
Earthquake X Mode 7	0.4	-0.0	-1.9					-0.0	-1.4	-0.0	0.5	0.0	2.1	-0.0	-0.9	-0.0	0.0	0.0			
Earthquake X Mode 8	0.7	-0.1	-3.0					-0.0	-2.3	0.0	0.9	0.1	3.6	-0.0	-1.5	0.0	0.0	0.0			
Earthquake X Mode 9	0.3	-0.4	4.4					-0.3	3.3	0.0	-0.0	0.5	-5.0	-0.4	2.1	0.0	0.0	0.0			
Earthquake Y Mode 1	27.6	0.7	17.6					0.6	15.8	0.1	24.9	-0.9	-29.3	0.4	8.0	0.4	0.0	0.0			
Earthquake Y Mode 2	1.0	-1.9	14.2					-1.6	12.5	0.0	-0.6	3.0	-23.1	-2.1	6.3	0.0	0.0	0.0			
Earthquake Y Mode 3	82.5	1.8	51.5					1.5	47.8	-1.1	74.3	-2.4	-89.8	1.0	23.8	-0.7	-0.1	0.0			
Earthquake Y Mode 4	-1.7	-0.0	-1.1					-0.0	-0.1	-0.0	-1.7	-0.0	-0.7	0.0	-0.1	-0.0	0.0	0.0			
Earthquake Y Mode 5	-0.4	0.1	-1.1					0.0	-0.1	0.0	-0.4	0.0	-0.6	0.0	-0.1	-0.0	0.0	0.0			
Earthquake Y Mode 6	-20.7	-0.2	-13.9					-0.1	-1.9	0.1	-20.7	0.0	-7.7	0.0	-1.2	0.0	0.0	0.0			
Earthquake Y Mode 7	0.1	-0.0	-0.6					-0.0	-0.4	-0.0	0.1	0.0	0.6	-0.0	-0.3	-0.0	0.0	0.0			
Earthquake Y Mode 8	1.7	-0.1	-7.6					-0.1	-5.7	0.0	2.3	0.1	8.9	-0.1	-3.7	0.0	0.0	0.0			
Earthquake Y Mode 9	0.1	-0.1	1.6					-0.1	1.2	0.0	-0.0	0.2	-1.8	-0.1	0.8	0.0	0.0	0.0			
	Floor 2	30.0	3.00/6.00					Self weight	250.5	-13.1	-2.2	-9.7	-1.3	-0.1	228.1	16.2	3.4	-11.2	-0.3	-0.7	
								Dead load	141.0	-1.7	-2.4	-1.2	-2.5	-0.0	138.3	2.0	6.3	-1.3	-1.7	-0.1	-0.1
								Live load	69.4	-7.9	-0.6	-5.9	-0.1	-0.1	68.6	9.8	0.3	-6.8	0.2	-0.4	-0.1
								Wind +X ecc.+	3.9	0.6	-0.5	0.5	-0.4	-0.0	3.8	-0.8	0.7	0.5	-0.2	0.0	0.0
				Wind +X ecc.-	6.9	0.6	2.0	0.4	1.4	0.0	6.6	-0.7	-2.0	0.5	0.7	0.1	0.0	0.0			
				Wind -X ecc.+	-3.9	-0.6	0.5	-0.5	0.4	0.0	-3.8	0.8	-0.7	-0.5	0.2	-0.0	0.0	0.0			
				Wind -X ecc.-	-6.9	-0.6	-2.0	-0.4	-1.4	-0.0	-6.6	0.7	2.0	-0.5	-0.7	-0.1	0.0	0.0			
				Wind +Y ecc.+	34.6	-0.0	25.2	0.0	18.6	-0.1	31.8	0.1	-29.7	-0.3	9.8	0.0	0.0	0.0			
				Wind +Y ecc.-	20.6	0.1	13.9	0.1	10.5	-0.2	19.0	-0.0	-17.1	-0.1	5.4	-0.2	0.0	0.0			
				Wind -Y ecc.+	-34.6	0.0	-25.2	-0.0	-18.6	0.1	-31.8	-0.1	29.7	0.3	-9.8	-0.0	0.0	0.0			
				Wind -Y ecc.-	-20.6	-0.1	-13.9	-0.1	-10.5	0.2	-19.0	0.0	17.1	0.1	-5.4	0.2	0.0	0.0			
				Earthquake X Mode 1	97.3	1.7	61.5	1.2	40.4	0.3	91.2	-1.6	-58.1	0.6	21.6	0.9	0.0	0.0			
				Earthquake X Mode 2	38.4	-7.6	68.3	-5.1	45.9	0.1	32.9	8.2	-68.6	-6.4	24.2	0.1	0.0	0.0			
				Earthquake X Mode 3	22.2	0.3	13.4	0.2	9.1	-0.2	20.8	-0.3	-13.6	0.1	4.8	-0.1	0.0	0.0			
				Earthquake X Mode 4	-7.0	0.0	2.0	0.1	3.8	0.0	-7.5	-0.2	-8.8	0.1	2.2	0.1	0.0	0.0			
				Earthquake X Mode 5	0.1	-0.4	2.6	-0.5	4.4	0.0	-0.5	1.3	-10.0	-0.9	2.6	0.0	0.0	0.0			
				Earthquake X Mode 6	-1.9	-0.0	0.4	0.0	1.1	-0.0	-2.1	-0.0	-2.6	0.0	0.6	-0.0	0.0	0.0			
				Earthquake X Mode 7	-0.1	-0.0	-1.1	-0.0	-0.0	-0.0	-0.1	-0.0	-0.9	0.0	-0.0	-0.0	0.0	0.0			
				Earthquake X Mode 8	-0.1	-0.0	-2.0	-0.0	-0.2	0.0	-0.1	-0.0	-1.2	0.0	-0.1	0.0	0.0	0.0			
				Earthquake X Mode 9	1.2	-0.2	2.6	-0.0	0.2	-0.0	1.3	-0.1	1.8	0.0	0.1	-0.0	0.0	0.0			
				Earthquake Y Mode 1	44.2	0.8	27.9	0.5	18.3	0.1	41.4	-0.7	-26.3	0.3	9.8	0.4	0.0	0.0			
				Earthquake Y Mode 2	11.9	-2.3	21.1	-1.6	14.2	0.0	10.2	2.5	-21.2	-2.0	7.5	0.0	0.0	0.0			
				Earthquake Y Mode 3	136.6	1.8	82.4	1.3	56.2	-1.2	127.8	-1.8	-83.7	0.6	29.4	-0.8	-0.1	0.0			
				Earthquake Y Mode 4	-1.4	0.0	0.4	0.0	0.7	0.0	-1.4	-0.0	-1.7	0.0	0.4	0.0	0.0	0.0			
				Earthquake Y Mode 5	0.0	-0.1	0.5	-0.1	0.8	0.0	-0.1	0.2	-1.8	-0.2	0.5	0.0	0.0	0.0			
				Earthquake Y Mode 6	-15.9	-0.0	3.6	0.0	8.7	-0.1	-17.1	-0.1	-21.4	0.0	5.1	-0.0	0.0	0.0			
				Earthquake Y Mode 7	-0.0	-0.0	-0.3	0.0	-0.0	-0.0	-0.0	-0.0	-0.3	0.0	-0.0	-0.0	0.0	0.0			
				Earthquake Y Mode 8	-0.3	-0.1	-5.0	-0.0	-0.5	0.0	-0.4	-0.1	-3.1	0.0	-0.3	0.0	0.0	0.0			
				Earthquake Y Mode 9	0.5	-0.1	1.0	-0.0	0.1	-0.0	0.5	-0.1	0.6	0.0	0.0	0.0	0.0	0.0			



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 1	30.0	0.00/3.00	Self weight	311.4	-5.5	2.1	-6.0	0.7	-0.1	288.1	12.4	1.8	-6.8	1.0	-0.6				
				Dead load	166.2	-0.7	-0.8	-0.8	-1.9	-0.0	163.3	1.6	6.3	-0.9	-1.2	-0.1				
				Live load	90.4	-3.4	1.7	-3.6	0.9	-0.1	89.2	7.5	-0.6	-4.2	0.9	-0.3				
				Wind +X ecc.+	4.0	1.0	-0.4	0.5	-0.3	-0.0	4.0	-0.5	0.6	0.5	-0.2	0.0				
				Wind +X ecc.-	8.6	1.0	4.4	0.5	1.8	0.0	8.4	-0.4	-0.7	0.5	1.2	0.1				
				Wind -X ecc.+	-4.0	-1.0	0.4	-0.5	0.3	0.0	-4.0	0.5	-0.6	-0.5	0.2	-0.0				
				Wind -X ecc.-	-8.6	-1.0	-4.4	-0.5	-1.8	-0.0	-8.4	0.4	0.7	-0.5	-1.2	-0.1				
				Wind +Y ecc.+	52.6	-0.1	56.9	-0.0	25.0	-0.1	50.5	0.1	-16.6	-0.3	16.3	0.0				
				Wind +Y ecc.-	31.6	0.1	34.5	0.0	15.4	-0.2	30.3	0.0	-10.6	-0.1	10.1	-0.1				
				Wind -Y ecc.+	-52.6	0.1	-56.9	0.0	-25.0	0.1	-50.5	-0.1	16.6	0.3	-16.3	-0.0				
				Wind -Y ecc.-	-31.6	-0.1	-34.5	-0.0	-15.4	0.2	-30.3	-0.0	10.6	0.1	-10.1	0.1				
				Earthquake X Mode 1	131.9	2.1	105.8	1.0	43.0	0.2	128.0	-0.6	-21.3	0.4	27.7	0.6				
				Earthquake X Mode 2	72.1	-10.3	115.1	-4.9	49.0	-0.0	68.9	4.3	-30.4	-5.2	31.0	0.1				
				Earthquake X Mode 3	31.1	0.4	27.1	0.2	11.4	-0.1	30.1	-0.1	-6.5	0.1	7.4	-0.1				
				Earthquake X Mode 4	-3.2	0.2	11.8	0.1	6.0	0.0	-3.6	-0.1	-5.8	0.1	4.0	0.1				
				Earthquake X Mode 5	4.0	-1.5	13.4	-0.8	7.0	0.0	3.5	1.0	-7.2	-1.0	4.6	0.0				
				Earthquake X Mode 6	-0.7	0.0	3.7	0.0	1.9	-0.0	-0.9	-0.0	-1.9	0.0	1.3	-0.0				
				Earthquake X Mode 7	0.4	0.1	2.4	0.0	1.5	0.0	0.3	-0.0	-1.9	0.0	1.1	0.0				
				Earthquake X Mode 8	0.7	0.1	4.1	0.0	2.6	-0.0	0.5	-0.1	-3.4	0.1	1.8	0.0				
				Earthquake X Mode 9	0.2	0.5	-5.7	0.3	-3.6	-0.0	0.4	-0.5	4.7	0.4	-2.5	-0.0				
				Earthquake Y Mode 1	59.8	0.9	48.0	0.5	19.5	0.1	58.1	-0.3	-9.7	0.2	12.6	0.3				
				Earthquake Y Mode 2	22.3	-3.2	35.6	-1.5	15.1	-0.0	21.3	1.3	-9.4	-1.6	9.6	0.0				
				Earthquake Y Mode 3	191.5	2.4	166.6	1.2	70.3	-0.9	185.4	-0.8	-40.1	0.5	45.7	-0.5				
				Earthquake Y Mode 4	-0.6	0.0	2.3	0.0	1.2	0.0	-0.7	-0.0	-1.1	0.0	0.8	0.0				
				Earthquake Y Mode 5	0.7	-0.3	2.4	-0.1	1.3	0.0	0.6	0.2	-1.3	-0.2	0.8	0.0				
				Earthquake Y Mode 6	-5.9	0.2	30.6	0.1	15.9	-0.1	-7.0	-0.0	-15.7	0.0	10.5	-0.0				
				Earthquake Y Mode 7	0.1	0.0	0.7	0.0	0.5	0.0	0.1	-0.0	-0.6	0.0	0.3	0.0				
				Earthquake Y Mode 8	1.7	0.2	10.2	0.1	6.5	-0.0	1.2	-0.2	-8.4	0.1	4.6	0.0				
				Earthquake Y Mode 9	0.1	0.2	-2.1	0.1	-1.3	-0.0	0.2	-0.2	1.7	0.2	-0.9	-0.0				
				W50	techo	30.0	12.00/15.00	Self weight	145.0	1.1	-12.9	-0.1	-10.1	0.7	110.5	4.3	16.5	-3.0	-8.9	-0.3
								Dead load	114.9	6.5	-4.0	5.3	-4.7	0.8	107.2	-5.6	8.9	0.5	-2.1	0.8
								Live load	25.0	-0.5	-7.0	-1.0	-5.0	0.2	23.3	3.1	7.8	-1.3	-5.3	-0.6
Wind +X ecc.+	0.3	-3.0	0.2					1.0	0.1	-0.1	0.1	-5.6	-0.2	-0.3	0.1	-0.1				
Wind +X ecc.-	0.7	-2.6	0.6					0.9	0.5	-0.0	0.5	-5.1	-0.8	-0.3	0.5	0.1				
Wind -X ecc.+	-0.3	3.0	-0.2					-1.0	-0.1	0.1	-0.1	5.6	0.2	0.3	-0.1	0.1				
Wind -X ecc.-	-0.7	2.6	-0.6					-0.9	-0.5	0.0	-0.5	5.1	0.8	0.3	-0.5	-0.1				
Wind +Y ecc.+	4.4	0.7	4.4					-0.4	3.6	0.2	4.5	2.0	-6.6	0.0	4.8	1.1				
Wind +Y ecc.-	2.7	-1.0	2.6					-0.1	2.1	-0.0	2.6	-0.6	-3.9	-0.2	2.8	0.5				
Wind -Y ecc.+	-4.4	-0.7	-4.4					0.4	-3.6	-0.2	-4.5	-2.0	6.6	-0.0	-4.8	-1.1				
Wind -Y ecc.-	-2.7	1.0	-2.6					0.1	-2.1	0.0	-2.6	0.6	3.9	0.2	-2.8	-0.5				
Earthquake X Mode 1	12.6	-2.2	12.3					1.2	9.9	0.9	12.3	-5.0	-18.2	0.0	13.3	3.4				
Earthquake X Mode 2	9.0	28.8	10.1					-21.9	8.3	1.5	12.4	90.3	-16.2	-0.7	13.0	4.6				
Earthquake X Mode 3	2.9	-1.2	2.8					0.9	2.3	-0.1	2.8	-3.6	-4.2	0.0	3.0	0.5				
Earthquake X Mode 4	-2.1	-0.6	-2.1					-0.5	-1.7	-0.2	-2.1	0.7	3.0	-0.3	-2.2	-0.6				
Earthquake X Mode 5	-2.2	17.7	-1.9					13.4	-1.5	-0.3	-2.8	-20.9	3.0	7.8	-2.5	-0.9				
Earthquake X Mode 6	-0.6	-0.3	-0.6					-0.2	-0.5	0.0	-0.6	0.4	0.9	-0.1	-0.6	-0.1				
Earthquake X Mode 7	0.3	-0.2	0.3					-0.1	0.3	0.0	0.3	0.1	-0.5	-0.1	0.3	0.1				
Earthquake X Mode 8	0.6	2.4	0.6					1.1	0.5	0.0	0.6	-0.7	-0.8	0.8	0.6	0.1				
Earthquake X Mode 9	-0.9	16.9	-0.8					7.6	-0.6	-0.1	-1.0	-5.3	1.1	5.9	-0.9	-0.3				
Earthquake Y Mode 1	5.7	-1.0	5.6					0.5	4.5	0.4	5.6	-2.3	-8.3	0.0	6.0	1.5				
Earthquake Y Mode 2	2.8	8.9	3.1					-6.8	2.5	0.4	3.8	27.9	-5.0	-0.2	4.0	1.4				
Earthquake Y Mode 3	18.1	-7.5	17.4					5.5	14.1	-0.4	17.2	-22.1	-25.6	0.2	18.2	2.9				
Earthquake Y Mode 4	-0.4	-0.1	-0.4					-0.1	-0.3	-0.0	-0.4	0.1	0.6	-0.1	-0.4	-0.1				
Earthquake Y Mode 5	-0.4	3.2	-0.4					2.4	-0.3	-0.1	-0.5	-3.8	0.5	1.4	-0.5	-0.2				
Earthquake Y Mode 6	-5.2	-2.3	-5.0					-1.9	-4.0	0.0	-5.0	3.1	7.2	-1.0	-5.2	-0.9				
Earthquake Y Mode 7	0.1	-0.0	0.1					-0.0	0.1	0.0	0.1	0.0	-0.1	-0.0	0.1	0.0				
Earthquake Y Mode 8	1.5	6.0	1.5					2.7	1.2	0.0	1.5	-1.9	-2.0	2.1	1.5	0.3				
Earthquake Y Mode 9	-0.3	6.2	-0.3					2.8	-0.2	-0.0	-0.4	-1.9	0.4	2.1	-0.3	-0.1				
Floor 4	30.0	9.00/12.00	Self weight		288.6	-0.3	-11.8	-1.2	-9.0	0.0	252.9	5.5	14.4	-3.6	-8.0	3.3				
			Dead load		172.9	8.7	0.4	7.7	0.4	0.2	168.2	-11.9	-1.5	3.3	2.2	1.5				
			Live load		89.3	1.3	-7.5	1.1	-5.8	-0.0	84.9	-0.9	9.4	-0.9	-5.3	2.0				
			Wind +X ecc.+		0.2	-1.2	0.2	3.7	0.1	-0.0	-0.2	-11.9	-0.1	1.3	-0.1	-0.0				
			Wind +X ecc.-		1.2	-1.0	0.6	3.3	0.5	0.0	0.8	-10.6	-0.8	1.2	0.5	0.1				
			Wind -X ecc.+		-0.2	1.2	-0.2	-3.7	-0.1	0.0	0.2	11.9	0.1	-1.3	0.1	0.0				
			Wind -X ecc.-		-1.2	1.0	-0.6	-3.3	-0.5	-0.0	-0.8	10.6	0.8	-1.2	-0.5	-0.1				
			Wind +Y ecc.+		11.3	0.1	5.5	-1.1	4.2	0.3	11.1	3.5	-7.6	-0.4	5.7	0.6				
			Wind +Y ecc.-		6.6	-0.7	3.3	0.6	2.5	0.0	6.4	-2.4	-4.5	0.2	3.3	0.1				
			Wind -Y ecc.+		-11.3	-0.1	-5.5	1.1	-4.2	-0.3	-11.1	-3.5	7.6	0.4	-5.7	-0.6				
			Wind -Y ecc.-		-6.6	0.7	-3.3	-0.6	-2.5	-0.0	-6.4	2.4	4.5	-0.2	-3.3	-0.1				
			Earthquake X Mode 1		30.6	0.3	14.5	3.9	11.1	1.4	29.5	-10.4	-19.7	1.7	14.7	2.2				
			Earthquake X Mode 2		30.0	-12.1	12.8	-61.8	9.8	1.3	34.3	166.1	-18.8	-25.5	16.5	2.2				
			Earthquake X Mode 3		7.0	0.3	3.4	2.6	2.6	0.0	6.6	-6.9	-4.7	1.1	3.4	0.1				
			Earthquake X Mode 4		-4.5	-1.5	-1.6	-0.6	-1.2	-0.2	-4.4	0.2	2.0	-0.4	-1.5	-0.3				
			Earthquake X Mode 5		-5.7	41.7	-1.5	16.5	-1.1	-0.1	-5.8	-7.0	2.0	11.3	-2.0	-0.3				
			Earthquake X Mode 6		-1.3	-0.8	-0.5	-0.3	-0.4	-0.0	-1.3	0.2	0.6	-0.2	-0.5	-0.0				
			Earthquake X Mode 7		0.5	-0.1	-0.0	0.0	-0.0	-0.0	0.5	-0.1	0.1	0.0	-0.1	0.0				
			Earthquake X Mode 8		0.9	1.5	-0.0	-0.2	-0.1	0.0	0.9	2.0	0.1	-0.1	-0.1	0.0				
			Earthquake X Mode 9		-1.3	9.5	0.1	-1.8	0.1	0.0	-1.0	14.1	-0.2	-1.0	0.1	-0.0				
			Earthquake Y Mode 1		13.9	0.1	6.6	1.8	5.1	0.6	13.4	-4.7	-9.0	0.8	6.7	1.0				
			Earthquake Y Mode 2		9.3	-3.7	4.0	-19.1	3.0	0.4	10.6	51.3	-5.8	-7.9	5.1	0.7				
Earthquake Y Mode 3	43.3	2.0	21.2	15.7	16.3	0.0	40.8	-42.7	-28.6	6.6	20.9	0.8								
Earthquake Y Mode 4	-0.9	-0.3	-0.3	-0.1	-0.2	-0.0	-0.9	0.0	0.4	-0.1	-0.3	-0.1								
Earthquake Y Mode 5	-1.0	7.6	-0.3	3.0	-0.2	-0.0	-1.1	-1.3	0.4	2.1	-0.4	-0.0								
Earthquake Y Mode 6	-11.1	-6.5	-4.1	-2.9	-3.0	-0.1	-10.7	1.8	5.1	-2.0	-3.8	-0.3								
Earthquake Y Mode 7	0.1	-0.0	-0.0	0.0	-0.0	-0.0	0.1	-0.0	0.0	0.0	0.0	0.0								
Earthquake Y Mode 8	2.2	3.9	-0.1	-0.4	-0.1	0.0	2.2	4.9	0.4	-0.2	-0.3	0.0								
Earthquake Y Mode 9	-0.5	3.5	0.0	-0.7	0.0	0.0	-0.4	5.2	-0.1	-0.3	0.0	-0.0								



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 3	30.0	6.00/9.00	Self weight	432.9	1.0	-10.7	0.1	-8.3	0.0	395.2	3.4	13.2	-2.5	-7.1	3.3				
				Dead load	231.6	9.0	0.1	7.5	-0.0	0.2	226.2	-10.8	-0.4	3.1	1.3	1.5				
				Live load	153.9	1.3	-6.9	0.8	-5.3	-0.0	148.7	0.3	8.5	-1.2	-4.7	2.0				
				Wind +X ecc.+	-0.2	3.1	0.1	5.8	0.1	-0.0	-0.6	-13.6	-0.1	2.6	-0.2	-0.0				
				Wind +X ecc.-	1.7	2.9	0.8	5.2	0.6	0.1	1.3	-12.1	-0.9	2.3	0.5	0.1				
				Wind -X ecc.+	0.2	-3.1	-0.1	-5.8	-0.1	0.0	0.6	13.6	0.1	-2.6	0.2	0.0				
				Wind -X ecc.-	-1.7	-2.9	-0.8	-5.2	-0.6	-0.1	-1.3	12.1	0.9	-2.3	-0.5	-0.1				
				Wind +Y ecc.+	20.5	-1.4	7.1	-1.8	5.5	0.4	20.1	4.0	-9.8	-0.8	7.4	0.7				
				Wind +Y ecc.-	11.9	-0.4	4.2	0.9	3.2	0.0	11.5	-2.9	-5.8	0.4	4.3	0.2				
				Wind -Y ecc.+	-20.5	1.4	-7.1	1.8	-5.5	-0.4	-20.1	-4.0	9.8	0.8	-7.4	-0.7				
				Wind -Y ecc.-	-11.9	0.4	-4.2	-0.9	-3.2	-0.0	-11.5	2.9	5.8	-0.4	-4.3	-0.2				
				Earthquake X Mode 1	52.5	5.2	17.4	5.5	13.3	1.7	51.1	-10.3	-23.4	2.9	17.5	2.7				
				Earthquake X Mode 2	58.5	-76.7	16.0	-82.7	12.1	1.4	62.4	164.2	-23.2	-39.6	20.4	2.6				
				Earthquake X Mode 3	12.1	2.6	4.2	3.4	3.2	-0.0	11.6	-7.0	-5.6	1.6	4.1	0.1				
				Earthquake X Mode 4	-5.7	-1.2	-0.4	-0.1	-0.3	-0.1	-5.6	-1.0	0.4	-0.1	-0.3	-0.1				
				Earthquake X Mode 5	-7.2	36.7	-0.3	2.4	-0.2	-0.0	-6.4	28.1	0.3	2.5	-0.5	-0.1				
				Earthquake X Mode 6	-1.7	-0.8	-0.2	-0.1	-0.1	-0.0	-1.7	-0.5	0.1	-0.1	-0.1	-0.0				
				Earthquake X Mode 7	0.2	0.1	-0.3	0.1	-0.2	-0.0	0.2	-0.2	0.4	0.1	-0.3	-0.1				
				Earthquake X Mode 8	0.4	-2.0	-0.5	-1.4	-0.4	-0.0	0.5	2.1	0.7	-1.1	-0.5	-0.0				
				Earthquake X Mode 9	-0.4	-13.7	0.7	-9.5	0.5	0.0	-0.1	13.6	-0.9	-7.1	0.7	0.1				
				Earthquake Y Mode 1	23.8	2.4	7.9	2.5	6.0	0.8	23.2	-4.7	-10.6	1.3	7.9	1.2				
				Earthquake Y Mode 2	18.1	-23.7	4.9	-25.6	3.7	0.4	19.3	50.7	-7.2	-12.2	6.3	0.8				
				Earthquake Y Mode 3	74.5	16.1	25.7	20.7	19.7	-0.0	71.4	-43.2	-34.4	9.8	25.1	0.9				
				Earthquake Y Mode 4	-1.1	-0.2	-0.1	-0.0	-0.1	-0.0	-1.1	-0.2	0.1	-0.0	-0.1	-0.0				
				Earthquake Y Mode 5	-1.3	6.7	-0.1	0.4	-0.0	-0.0	-1.2	5.1	0.1	0.5	-0.1	-0.0				
				Earthquake Y Mode 6	-14.1	-6.4	-1.2	-0.8	-0.8	-0.0	-14.0	-4.0	1.1	-0.7	-0.9	-0.1				
				Earthquake Y Mode 7	0.1	0.0	-0.1	0.0	-0.1	-0.0	0.1	-0.0	0.1	0.0	-0.1	-0.0				
				Earthquake Y Mode 8	1.1	-4.9	-1.2	-3.6	-0.9	-0.0	1.2	5.3	1.7	-2.7	-1.3	-0.1				
				Earthquake Y Mode 9	-0.1	-5.0	0.2	-3.5	0.2	0.0	-0.0	5.0	-0.3	-2.6	0.3	0.0				
					Floor 2	30.0	3.00/6.00	Self weight	578.1	4.3	-9.7	1.6	-7.4	0.0	538.4	2.9	11.6	-1.4	-5.9	3.3
								Dead load	291.0	10.1	0.6	7.8	0.4	0.2	284.8	-10.4	-1.0	3.4	1.8	1.5
								Live load	219.2	3.2	-6.5	1.7	-4.9	-0.0	213.0	-0.4	7.7	-0.5	-4.1	2.1
								Wind +X ecc.+	-0.8	13.3	0.1	8.5	0.1	-0.0	-1.2	-11.7	0.0	5.0	-0.2	-0.0
								Wind +X ecc.-	2.1	11.9	0.8	7.6	0.6	0.1	1.7	-10.3	-0.9	4.4	0.5	0.1
								Wind -X ecc.+	0.8	-13.3	-0.1	-8.5	-0.1	0.0	1.2	11.7	-0.0	-5.0	0.2	0.0
								Wind -X ecc.-	-2.1	-11.9	-0.8	-7.6	-0.6	-0.1	-1.7	10.3	0.9	-4.4	-0.5	-0.1
Wind +Y ecc.+	31.4	-5.0	8.1					-2.6	6.1	0.4	30.9	3.1	-10.7	-1.6	8.2	0.8				
Wind +Y ecc.-	18.1	1.1	4.9					1.6	3.7	-0.0	17.6	-3.4	-6.3	0.8	4.8	0.2				
Wind -Y ecc.+	-31.4	5.0	-8.1					2.6	-6.1	-0.4	-30.9	-3.1	10.7	1.6	-8.2	-0.8				
Wind -Y ecc.-	-18.1	-1.1	-4.9					-1.6	-3.7	0.0	-17.6	3.4	6.3	-0.8	-4.8	-0.2				
Earthquake X Mode 1	76.0	12.9	17.6					6.7	13.2	1.8	74.4	-5.9	-22.8	4.1	17.2	2.8				
Earthquake X Mode 2	91.0	-191.8	17.0					-104.9	12.5	1.4	93.1	116.2	-23.4	-61.4	21.1	2.6				
Earthquake X Mode 3	17.6	7.0	4.4					4.4	3.3	-0.0	17.1	-5.6	-5.6	2.5	4.1	0.1				
Earthquake X Mode 4	-5.1	0.2	1.0					0.5	0.7	0.1	-5.1	-1.3	-1.4	0.4	1.0	0.1				
Earthquake X Mode 5	-5.7	-0.2	1.1					-15.0	0.9	0.1	-4.6	42.3	-1.6	-9.8	1.3	0.1				
Earthquake X Mode 6	-1.5	-0.1	0.3					0.3	0.2	0.0	-1.6	-0.8	-0.4	0.2	0.3	0.0				
Earthquake X Mode 7	0.0	0.2	-0.0					0.0	-0.0	-0.0	0.0	0.1	-0.0	0.0	-0.0	-0.0				
Earthquake X Mode 8	0.1	-1.8	-0.1					-0.1	-0.0	-0.0	0.1	-1.4	0.0	-0.1	-0.0	-0.0				
Earthquake X Mode 9	0.3	-11.2	0.1					-0.3	0.0	0.0	0.0	-9.9	-0.1	-0.5	0.1	0.0				
Earthquake Y Mode 1	34.5	5.8	8.0					3.0	6.0	0.8	33.8	-2.7	-10.4	1.9	7.8	1.3				
Earthquake Y Mode 2	28.1	-59.3	5.2					-32.4	3.9	0.4	28.8	35.9	-7.2	-19.0	6.5	0.8				
Earthquake Y Mode 3	108.4	43.1	26.9					26.8	20.1	-0.1	105.1	-34.3	-34.4	15.3	25.3	0.9				
Earthquake Y Mode 4	-1.0	0.0	0.2					0.1	0.1	0.0	-1.0	-0.3	-0.3	0.1	0.2	0.0				
Earthquake Y Mode 5	-1.0	-0.0	0.2					-2.7	0.2	0.0	-0.8	7.7	-0.3	-1.8	0.2	0.0				
Earthquake Y Mode 6	-12.7	-1.1	2.4					2.1	1.9	0.0	-12.8	-6.9	-3.4	1.3	2.5	0.0				
Earthquake Y Mode 7	0.0	0.1	-0.0					0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0				
Earthquake Y Mode 8	0.3	-4.5	-0.2					-0.3	-0.1	-0.0	0.2	-3.4	0.1	-0.3	-0.1	-0.0				
Earthquake Y Mode 9	0.1	-4.1	0.0					-0.1	0.0	0.0	0.0	-3.6	-0.0	-0.2	0.0	0.0				
	Floor 1	30.0	0.00/3.00					Self weight	724.9	5.7	-3.6	1.8	-3.9	0.0	683.4	4.3	7.0	-1.3	-1.6	3.3
								Dead load	351.4	6.1	0.4	5.9	0.3	0.1	344.5	-8.7	-1.1	1.9	1.7	1.4
								Live load	285.6	3.4	-2.4	1.6	-2.7	-0.0	278.5	0.6	4.9	-0.6	-1.4	2.1
								Wind +X ecc.+	-1.5	42.0	0.0	14.3	0.0	-0.0	-1.5	-0.1	0.1	11.3	-0.2	-0.0
								Wind +X ecc.-	2.3	37.0	0.5	12.5	0.4	0.1	2.3	0.1	-0.5	9.9	0.2	0.1
								Wind -X ecc.+	1.5	-42.0	-0.0	-14.3	-0.0	0.0	1.5	0.1	-0.1	-11.3	0.2	0.0
								Wind -X ecc.-	-2.3	-37.0	-0.5	-12.5	-0.4	-0.1	-2.3	-0.1	0.5	-9.9	-0.2	-0.1
				Wind +Y ecc.+	41.3	-10.4	6.1	-3.0	4.3	0.2	40.5	-1.1	-7.2	-2.4	5.7	0.6				
				Wind +Y ecc.-	23.9	12.7	3.8	5.2	2.7	-0.0	23.4	-2.3	-4.4	4.1	3.4	0.1				
				Wind -Y ecc.+	-41.3	10.4	-6.1	3.0	-4.3	-0.2	-40.5	1.1	7.2	2.4	-5.7	-0.6				
				Wind -Y ecc.-	-23.9	-12.7	-3.8	-5.2	-2.7	0.0	-23.4	2.3	4.4	-4.1	-3.4	-0.1				
				Earthquake X Mode 1	94.8	24.0	11.4	6.8	8.0	1.1	93.3	4.5	-13.1	5.3	10.2	1.9				
				Earthquake X Mode 2	118.5	-470.2	11.7	-148.1	8.1	0.8	115.9	-31.5	-14.4	-116.7	13.9	1.8				
				Earthquake X Mode 3	22.2	22.7	3.1	7.9	2.2	-0.0	21.8	-0.2	-3.5	6.2	2.6	0.1				
				Earthquake X Mode 4	-3.6	1.7	1.2	0.6	0.8	0.1	-3.6	-0.2	-1.4	0.5	1.1	0.2				
				Earthquake X Mode 5	-2.8	-66.8	1.3	-28.7	0.9	0.1	-2.4	16.7	-1.7	-22.7	1.5	0.2				
				Earthquake X Mode 6	-1.1	1.5	0.4	0.7	0.3	0.0	-1.1	-0.5	-0.5	0.5	0.4	0.0				
				Earthquake X Mode 7	0.2	-0.3	0.2	-0.2	0.2	0.0	0.2	0.2	-0.3	-0.1	0.2	0.0				
				Earthquake X Mode 8	0.4	3.0	0.4	1.8	0.3	0.0	0.4	-2.1	-0.5	1.4	0.4	0.0				
				Earthquake X Mode 9	-0.4	19.9	-0.5	11.6	-0.4	-0.0	-0.7	-13.6	0.7	9.3	-0.5	-0.0				
				Earthquake Y Mode 1	43.0	10.9	5.2	3.1	3.6	0.5	42.4	2.1	-6.0	2.4	4.6	0.9				
				Earthquake Y Mode 2	36.6	-145.2	3.6	-45.8	2.5	0.3	35.8	-9.7	-4.5	-36.1	4.3	0.5				
				Earthquake Y Mode 3	136.9	140.0	18.8	48.4	13.3	-0.2	134.4	-1.3	-21.5	38.3	16.3	0.7				
				Earthquake Y Mode 4	-0.7	0.3	0.2	0.1	0.2	0.0	-0.7	-0.0	-0.3	0.1	0.2	0.0				
				Earthquake Y Mode 5	-0.5	-12.2	0.2	-5.2	0.2	0.0	-0.4	3.0	-0.3	-4.1	0.3	0.0				
				Earthquake Y Mode 6	-8.7	12.3	3.1	5.6	2.3	0.0	-8.8	-3.9	-3.8	4.5	2.9	0.1				
				Earthquake Y Mode 7	0.1	-0.1	0.1	-0.1	0.0	0.0	0.1	0.1	-0.1	-0.0	0.1	0.0				
				Earthquake Y Mode 8	1.0	7.6	1.0	4.5	0.7	0.0	0.9	-5.3	-1.3	3.6	1.0	0.0				
				Earthquake Y Mode 9	-0.1	7.3	-0.2	4.3	-0.1	-0.0	-0.2	-5.0	0.2	3.4	-0.2	-0.0				



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
W51	techo	30.0	12.00/15.00	Self weight	236.2	4.7	36.7	7.4	30.5	-0.8	192.6	-18.4	-54.4	3.9	33.0	-8.4			
				Dead load	40.5	14.2	-0.1	6.5	-0.9	-0.8	38.5	-4.9	2.1	5.0	0.1	-0.6			
				Live load	47.6	1.8	17.5	1.0	12.3	-0.5	45.8	-1.7	-19.8	0.6	13.8	-2.7			
				Wind +X ecc.+	0.3	-9.8	-0.3	-0.9	-0.2	0.1	0.3	-7.0	0.4	-2.0	-0.3	0.1			
				Wind +X ecc.-	-0.2	-11.0	0.2	-1.2	0.1	0.1	-0.2	-7.5	-0.3	-2.3	0.2	0.1			
				Wind -X ecc.+	-0.3	9.8	0.3	0.9	0.2	-0.1	-0.3	7.0	-0.4	2.0	0.3	-0.1			
				Wind -X ecc.-	0.2	11.0	-0.2	1.2	-0.1	-0.1	0.2	7.5	0.3	2.3	-0.2	-0.1			
				Wind +Y ecc.+	-5.3	-3.7	5.0	-0.9	4.1	0.0	-5.0	-1.0	-7.8	-1.1	5.2	-0.2			
				Wind +Y ecc.-	-3.1	1.9	3.0	0.1	2.5	-0.1	-3.0	1.4	-4.6	0.3	3.1	-0.3			
				Wind -Y ecc.+	5.3	3.7	-5.0	0.9	-4.1	-0.0	5.0	1.0	7.8	1.1	-5.2	0.2			
				Wind -Y ecc.-	3.1	-1.9	-3.0	-0.1	-2.5	0.1	3.0	-1.4	4.6	-0.3	-3.1	0.3			
				Earthquake X Mode 1	-13.5	-52.7	12.5	-5.2	10.3	1.1	-12.7	-37.0	-19.3	-11.0	12.9	0.6			
				Earthquake X Mode 2	-17.9	87.9	18.1	-1.3	14.7	-0.4	-17.4	89.9	-27.3	13.5	17.9	-1.0			
				Earthquake X Mode 3	-3.2	-1.9	3.0	-0.2	2.5	-0.1	-3.0	-1.3	-4.7	-0.4	3.1	-0.3			
				Earthquake X Mode 4	2.6	-8.2	-2.2	-5.7	-1.8	-0.2	2.5	8.3	3.3	-3.9	-2.2	-0.2			
				Earthquake X Mode 5	2.4	22.6	-3.0	14.6	-2.4	0.0	2.3	-19.7	4.4	10.3	-2.9	0.1			
				Earthquake X Mode 6	0.7	-0.5	-0.7	-0.2	-0.6	0.0	0.7	0.2	1.0	-0.2	-0.7	0.1			
				Earthquake X Mode 7	-0.5	10.1	0.4	4.1	0.3	0.1	-0.5	-1.9	-0.5	3.5	0.4	0.1			
				Earthquake X Mode 8	-0.7	5.3	0.7	2.1	0.5	-0.0	-0.7	-0.9	-1.0	1.8	0.7	-0.0			
				Earthquake X Mode 9	0.8	25.3	-1.0	10.3	-0.8	-0.0	0.7	-4.7	1.4	8.7	-0.9	0.0			
				Earthquake Y Mode 1	-6.1	-23.9	5.7	-2.4	4.7	0.5	-5.7	-16.8	-8.8	-5.0	5.9	0.3			
				Earthquake Y Mode 2	-5.5	27.1	5.6	-0.4	4.5	-0.1	-5.4	27.8	-8.4	4.2	5.5	-0.3			
				Earthquake Y Mode 3	-19.5	-11.7	18.7	-1.3	15.4	-0.9	-18.5	-8.0	-28.9	-2.7	19.3	-2.0			
				Earthquake Y Mode 4	0.5	-1.6	-0.4	-1.1	-0.3	-0.0	0.5	1.6	0.6	-0.7	-0.4	-0.0			
				Earthquake Y Mode 5	0.4	4.1	-0.5	2.7	-0.4	0.0	0.4	-3.6	0.8	1.9	-0.5	0.0			
				Earthquake Y Mode 6	5.9	-3.8	-5.7	-1.9	-4.5	0.2	5.6	1.7	8.4	-1.4	-5.7	0.5			
				Earthquake Y Mode 7	-0.1	3.0	0.1	1.2	0.1	0.0	-0.1	-0.6	-0.2	1.0	0.1	0.0			
				Earthquake Y Mode 8	-1.9	13.2	1.8	5.3	1.3	-0.0	-1.8	-2.2	-2.4	4.5	1.7	-0.1			
				Earthquake Y Mode 9	0.3	9.2	-0.4	3.8	-0.3	-0.0	0.3	-1.7	0.5	3.2	-0.3	0.0			
				Floor 4	30.0	9.00/12.00	Self weight	446.5	6.5	28.7	6.2	21.4	-0.8	401.5	-6.5	-33.3	-1.9	18.1	-8.6
							Dead load	107.4	13.2	1.6	10.6	1.3	-0.1	104.6	-14.7	-2.0	4.8	0.7	-1.5
							Live load	151.2	4.6	19.6	5.0	15.0	-0.5	145.6	-8.3	-24.4	-0.2	13.7	-5.4
							Wind +X ecc.+	0.1	-7.8	-0.3	4.3	-0.2	0.0	-0.5	-19.9	0.3	1.4	-0.1	0.1
							Wind +X ecc.-	-1.1	-8.8	0.3	4.6	0.2	0.1	-1.7	-22.0	-0.5	1.4	0.5	0.1
							Wind -X ecc.+	-0.1	7.8	0.3	-4.3	0.2	-0.0	0.5	19.9	-0.3	-1.4	0.1	-0.1
							Wind -X ecc.-	1.1	8.8	-0.3	-4.6	-0.2	-0.1	1.7	22.0	0.5	-1.4	-0.5	-0.1
	Wind +Y ecc.+	-13.3	-2.8				6.3	0.8	4.8	0.0	-13.3	-5.3	-8.5	0.0	5.8	-0.1			
	Wind +Y ecc.-	-7.7	2.0				3.7	-0.8	2.9	-0.2	-7.5	4.1	-5.0	-0.3	3.3	-0.3			
	Wind -Y ecc.+	13.3	2.8				-6.3	-0.8	-4.8	-0.0	13.3	5.3	8.5	-0.0	-5.8	0.1			
	Wind -Y ecc.-	7.7	-2.0				-3.7	0.8	-2.9	0.2	7.5	-4.1	5.0	0.3	-3.3	0.3			
	Earthquake X Mode 1	-35.9	-28.0				15.2	27.2	11.7	1.2	-38.5	-106.6	-20.9	11.0	14.9	1.3			
	Earthquake X Mode 2	-37.5	37.1				20.4	-61.7	15.5	0.1	-31.8	212.6	-26.1	-27.4	16.1	-0.3			
	Earthquake X Mode 3	-8.1	-0.3				3.8	1.1	2.9	-0.2	-8.1	-3.6	-5.1	0.5	3.4	-0.3			
	Earthquake X Mode 4	5.9	-28.2				-1.8	-10.0	-1.3	-0.2	5.5	0.9	2.1	-7.8	-1.6	-0.2			
	Earthquake X Mode 5	4.4	63.5				-2.3	21.2	-1.7	-0.1	5.2	1.7	2.6	16.8	-1.5	-0.0			
Earthquake X Mode 6	1.6	-1.1	-0.6				-0.3	-0.4	0.0	1.5	-0.3	0.7	-0.2	-0.5	0.0				
Earthquake X Mode 7	-0.7	7.0	-0.0				-0.8	-0.1	-0.0	-0.2	9.2	0.1	-0.3	-0.1	-0.0				
Earthquake X Mode 8	-1.1	3.1	-0.0				-0.6	-0.1	-0.0	-0.8	4.9	0.2	-0.4	-0.1	-0.0				
Earthquake X Mode 9	1.1	16.2	0.1				-2.5	0.1	0.0	2.1	23.2	-0.3	-1.3	0.3	0.0				
Earthquake Y Mode 1	-16.3	-12.7	6.9				12.3	5.3	0.5	-17.4	-48.4	-9.5	5.0	6.8	0.6				
Earthquake Y Mode 2	-11.6	11.5	6.3				-19.0	4.8	0.0	-9.8	65.7	-8.1	-8.5	5.0	-0.1				
Earthquake Y Mode 3	-49.7	-1.5	23.1				6.8	17.7	-1.3	-49.7	-22.3	-31.1	3.0	21.2	-1.9				
Earthquake Y Mode 4	1.1	-5.4	-0.3				-1.9	-0.2	-0.0	1.1	0.2	0.4	-1.5	-0.3	-0.0				
Earthquake Y Mode 5	0.8	11.5	-0.4				3.9	-0.3	-0.0	1.0	0.3	0.5	3.1	-0.3	-0.0				
Earthquake Y Mode 6	13.0	-8.7	-4.8				-2.1	-3.4	0.2	12.7	-2.2	5.6	-1.8	-3.9	0.3				
Earthquake Y Mode 7	-0.2	2.1	-0.0				-0.2	-0.0	-0.0	-0.1	2.8	0.0	-0.1	-0.0	-0.0				
Earthquake Y Mode 8	-2.7	7.8	-0.1				-1.6	-0.2	-0.0	-2.1	12.3	0.5	-0.9	-0.3	-0.0				
Earthquake Y Mode 9	0.4	5.9	0.0				-0.9	0.0	0.0	0.8	8.5	-0.1	-0.5	0.1	0.0				
Floor 3	30.0	6.00/9.00	Self weight				658.1	8.3	28.4	6.9	21.8	-0.7	612.7	-4.1	-35.1	-1.1	19.3	-8.2	
			Dead load				172.9	13.8	0.9	11.2	0.7	-0.1	170.0	-15.2	-0.6	5.4	-0.2	-1.5	
			Live load				253.4	5.1	18.5	4.5	14.1	-0.4	247.7	-5.1	-22.7	-0.5	12.5	-5.3	
			Wind +X ecc.+				-0.4	0.8	-0.3	7.8	-0.2	0.0	-0.9	-21.7	0.2	4.0	0.0	0.1	
			Wind +X ecc.-				-2.7	0.5	0.5	8.5	0.4	0.1	-3.2	-24.0	-0.7	4.3	0.7	0.1	
			Wind -X ecc.+				0.4	-0.8	0.3	-7.8	0.2	-0.0	0.9	21.7	-0.2	-4.0	-0.0	-0.1	
			Wind -X ecc.-				2.7	-0.5	-0.5	-8.5	-0.4	-0.1	3.2	24.0	0.7	-4.3	-0.7	-0.1	
			Wind +Y ecc.+	-24.0	0.3	8.1	1.8	6.2	0.0	-23.9	-5.4	-11.0	0.8	7.5	-0.1				
			Wind +Y ecc.-	-13.7	1.5	4.8	-1.4	3.7	-0.3	-13.5	5.2	-6.4	-0.6	4.3	-0.4				
			Wind -Y ecc.+	24.0	-0.3	-8.1	-1.8	-6.2	-0.0	23.9	5.4	11.0	-0.8	-7.5	0.1				
			Wind -Y ecc.-	13.7	-1.5	-4.8	1.4	-3.7	0.3	13.5	-5.2	6.4	0.6	-4.3	0.4				
			Earthquake X Mode 1	-64.9	25.5	18.7	43.0	14.2	1.4	-66.4	-99.9	-25.2	23.6	18.2	1.6				
			Earthquake X Mode 2	-58.6	-69.8	23.5	-92.2	17.8	0.3	-54.8	194.8	-29.7	-52.1	18.2	-0.3				
			Earthquake X Mode 3	-14.3	2.6	4.6	1.6	3.5	-0.3	-14.2	-2.4	-6.1	1.0	4.2	-0.4				
			Earthquake X Mode 4	7.5	-28.7	-0.5	-1.8	-0.3	-0.0	6.2	-23.1	0.3	-2.3	-0.3	-0.0				
			Earthquake X Mode 5	5.6	61.0	-0.7	2.8	-0.4	-0.0	8.2	52.6	0.4	4.0	-0.1	0.1				
			Earthquake X Mode 6	2.0	-0.8	-0.2	0.1	-0.1	0.0	2.0	-1.0	0.1	0.0	-0.1	0.0				
			Earthquake X Mode 7	-0.2	-7.7	-0.3	-5.5	-0.2	-0.1	0.1	8.3	0.4	-4.5	-0.3	-0.1				
			Earthquake X Mode 8	-0.5	-4.1	-0.6	-2.7	-0.4	0.0	-0.3	3.8	0.8	-2.2	-0.6	0.0				
			Earthquake X Mode 9	0.6	-19.6	0.8	-13.5	0.6	0.0	1.3	19.6	-1.1	-10.9	0.7	0.0				
			Earthquake Y Mode 1	-29.4	11.6	8.5	19.5	6.4	0.7	-30.1	-45.3	-11.4	10.7	8.2	0.7				
			Earthquake Y Mode 2	-18.1	-21.6	7.3	-28.5	5.5	0.1	-16.9	60.2	-9.2	-16.1	5.6	-0.1				
			Earthquake Y Mode 3	-87.9	15.7	28.5	9.8	21.6	-1.6	-87.3	-14.8	-37.7	5.9	25.9	-2.3				
			Earthquake Y Mode 4	1.4	-5.5	-0.1	-0.4	-0.1	-0.0	1.2	-4.5	0.1	-0.4	-0.1	-0.0				
			Earthquake Y Mode 5	1.0	11.1	-0.1	0.5	-0.1	-0.0	1.5	9.6	0.1	0.7	-0.0	0.0				
			Earthquake Y Mode 6	16.6	-6.7	-1.6	0.6	-0.9	0.1	16.2	-8.2	1.1	0.2	-0.8	0.2				
			Earthquake Y Mode 7	-0.1	-2.3	-0.1	-1.7	-0.1	-0.0	0.0	2.5	0.1	-1.3	-0.1	-0.0				
			Earthquake Y Mode 8	-1.2	-10.1	-1.5	-6.7	-1.1	0.0	-0.9	9.4	1.9	-5.4	-1.4	0.0				
			Earthquake Y Mode 9	0.2	-7.2	0.3	-4.9	0.2	0.0	0.5	7.2	-0.4	-4.0	0.3	0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	30.0	3.00/6.00	Self weight	866.7	12.4	29.2	8.4	21.8	-0.6	821.0	-1.8	-34.3	0.6	19.2	-7.9
				Dead load	238.4	15.0	0.8	11.5	0.6	-0.1	235.4	-14.2	-0.6	5.8	-0.3	-1.3
				Live load	354.7	7.1	19.5	5.3	14.5	-0.4	348.9	-4.2	-22.9	0.4	13.0	-5.1
				Wind +X ecc.+	-1.3	25.7	-0.2	14.2	-0.2	0.0	-1.4	-15.5	0.2	9.9	0.1	0.1
				Wind +X ecc.-	-4.7	28.0	0.6	15.6	0.4	0.1	-4.8	-17.4	-0.9	10.9	0.8	0.1
				Wind -X ecc.+	1.3	-25.7	0.2	-14.2	0.2	-0.0	1.4	15.5	-0.2	-9.9	-0.1	-0.1
				Wind -X ecc.-	4.7	-28.0	-0.6	-15.6	-0.4	-0.1	4.8	17.4	0.9	-10.9	-0.8	-0.1
				Wind +Y ecc.+	-36.6	8.3	9.4	3.6	7.0	0.0	-36.4	-3.0	-11.9	2.6	8.2	-0.1
				Wind +Y ecc.-	-20.9	-2.4	5.6	-2.9	4.2	-0.3	-20.6	5.6	-7.1	-1.9	4.8	-0.5
				Wind -Y ecc.+	36.6	-8.3	-9.4	-3.6	-7.0	-0.0	36.4	3.0	11.9	-2.6	-8.2	0.1
				Wind -Y ecc.-	20.9	2.4	-5.6	2.9	-4.2	0.3	20.6	-5.6	7.1	1.9	-4.8	0.5
				Earthquake X Mode 1	-97.0	140.4	19.6	66.6	14.3	1.5	-96.0	-54.8	-24.7	46.9	18.2	1.6
				Earthquake X Mode 2	-79.4	-292.7	23.4	-135.6	17.3	0.4	-80.4	99.4	-28.1	-96.0	17.1	-0.3
				Earthquake X Mode 3	-21.1	7.0	4.9	2.1	3.6	-0.3	-20.9	0.5	-6.1	1.6	4.3	-0.4
				Earthquake X Mode 4	6.4	-2.0	1.1	9.9	0.9	0.1	5.2	-30.7	-1.6	7.2	1.1	0.2
				Earthquake X Mode 5	5.5	1.4	1.2	-22.4	1.0	0.1	8.1	66.3	-1.8	-16.2	1.2	0.1
				Earthquake X Mode 6	1.8	0.2	0.3	0.4	0.3	-0.0	1.8	-0.9	-0.5	0.3	0.3	-0.0
				Earthquake X Mode 7	0.1	-7.2	-0.0	-0.2	-0.0	-0.0	-0.3	-6.5	-0.0	-0.4	-0.0	-0.0
				Earthquake X Mode 8	-0.0	-3.2	-0.1	0.1	-0.0	0.0	-0.2	-3.5	0.0	-0.0	-0.0	0.0
				Earthquake X Mode 9	0.3	-17.1	0.1	-0.1	0.0	0.0	-0.5	-16.6	0.0	-0.6	-0.1	-0.0
				Earthquake Y Mode 1	-44.0	63.7	8.9	30.2	6.5	0.7	-43.6	-24.8	-11.2	21.3	8.2	0.7
				Earthquake Y Mode 2	-24.5	-90.4	7.2	-41.9	5.4	0.1	-24.8	30.7	-8.7	-29.6	5.3	-0.1
				Earthquake Y Mode 3	-130.0	42.9	30.4	12.9	22.3	-1.8	-128.4	2.9	-37.8	9.9	26.3	-2.6
				Earthquake Y Mode 4	1.2	-0.4	0.2	1.9	0.2	0.0	1.0	-5.9	-0.3	1.4	0.2	0.0
				Earthquake Y Mode 5	1.0	0.3	0.2	-4.1	0.2	0.0	1.5	12.1	-0.3	-3.0	0.2	0.0
				Earthquake Y Mode 6	14.9	1.9	2.7	3.3	2.2	-0.1	14.6	-7.5	-4.0	2.5	2.8	-0.0
				Earthquake Y Mode 7	0.0	-2.2	-0.0	-0.1	-0.0	-0.0	-0.1	-2.0	-0.0	-0.1	-0.0	-0.0
				Earthquake Y Mode 8	-0.1	-7.9	-0.3	0.3	-0.1	0.0	-0.5	-8.8	0.0	-0.0	-0.1	0.0
				Earthquake Y Mode 9	0.1	-6.2	0.0	-0.0	0.0	0.0	-0.2	-6.1	0.0	-0.2	-0.0	-0.0
	Floor 1	30.0	0.00/3.00	Self weight	1076.7	9.6	12.3	7.1	12.9	-0.2	1030.7	1.8	-24.0	-0.1	8.9	-7.4
				Dead load	304.4	8.0	0.4	8.8	0.3	0.0	301.3	-12.3	-0.1	3.4	-0.6	-1.2
				Live load	457.6	4.8	8.3	4.4	8.7	-0.1	451.6	-2.4	-16.2	-0.3	6.1	-4.9
				Wind +X ecc.+	-2.1	83.6	-0.1	24.6	-0.1	0.0	-1.0	11.7	0.1	21.4	0.1	0.0
				Wind +X ecc.-	-6.6	92.9	0.5	27.5	0.3	0.1	-5.4	12.6	-0.6	24.0	0.6	0.1
				Wind -X ecc.+	2.1	-83.6	0.1	-24.6	0.1	-0.0	1.0	-11.7	-0.1	-21.4	-0.1	-0.0
				Wind -X ecc.-	6.6	-92.9	-0.5	-27.5	-0.3	-0.1	5.4	-12.6	0.6	-24.0	-0.6	-0.1
				Wind +Y ecc.+	-48.1	20.5	7.6	4.8	5.1	-0.0	-47.5	5.5	-7.9	4.3	5.8	-0.1
				Wind +Y ecc.-	-27.4	-22.9	4.7	-8.6	3.2	-0.3	-27.4	1.6	-4.9	-7.3	3.5	-0.4
				Wind -Y ecc.+	48.1	-20.5	-7.6	-4.8	-5.1	0.0	47.5	-5.5	7.9	-4.3	-5.8	0.1
				Wind -Y ecc.-	27.4	22.9	-4.7	8.6	-3.2	0.3	27.4	-1.6	4.9	7.3	-3.5	0.4
				Earthquake X Mode 1	-123.4	381.8	13.8	104.3	9.1	0.9	-116.9	75.0	-14.2	91.5	11.1	0.9
				Earthquake X Mode 2	-95.2	-742.2	15.8	-199.7	10.8	0.2	-107.0	-160.5	-15.9	-175.1	9.7	-0.3
				Earthquake X Mode 3	-26.9	8.2	3.7	0.7	2.5	-0.2	-26.4	5.7	-3.8	0.7	2.8	-0.3
				Earthquake X Mode 4	4.1	46.1	1.4	18.5	1.0	0.1	4.0	-7.9	-1.6	15.9	1.2	0.2
				Earthquake X Mode 5	4.6	-99.3	1.7	-39.1	1.2	0.1	4.7	14.9	-1.8	-33.5	1.2	0.1
Earthquake X Mode 6				1.2	1.1	0.5	0.4	0.3	-0.0	1.2	0.1	-0.5	0.3	0.4	-0.0	
Earthquake X Mode 7				-0.2	11.5	0.3	6.7	0.2	0.0	-0.5	-7.9	-0.3	5.6	0.2	0.1	
Earthquake X Mode 8				-0.4	5.5	0.5	3.1	0.4	-0.0	-0.6	-3.5	-0.6	2.6	0.4	0.0	
Earthquake X Mode 9				0.6	28.3	-0.7	16.2	-0.5	-0.0	-0.1	-18.9	0.8	13.7	-0.6	-0.0	
Earthquake Y Mode 1				-56.0	173.3	6.3	47.3	4.1	0.4	-53.1	34.0	-6.4	41.5	5.0	0.4	
Earthquake Y Mode 2				-29.4	-229.3	4.9	-61.7	3.3	0.1	-33.0	-49.6	-4.9	-54.1	3.0	-0.1	
Earthquake Y Mode 3				-165.5	50.3	22.9	4.1	15.4	-1.3	-162.7	35.1	-23.6	4.5	17.2	-2.0	
Earthquake Y Mode 4				0.8	8.9	0.3	3.6	0.2	0.0	0.8	-1.5	-0.3	3.1	0.2	0.0	
Earthquake Y Mode 5				0.8	-18.1	0.3	-7.1	0.2	0.0	0.8	2.7	-0.3	-6.1	0.2	0.0	
Earthquake Y Mode 6				10.0	9.4	3.9	2.9	2.7	-0.1	10.1	1.0	-4.4	2.5	3.2	-0.2	
Earthquake Y Mode 7				-0.1	3.5	0.1	2.0	0.1	0.0	-0.2	-2.4	-0.1	1.7	0.1	0.0	
Earthquake Y Mode 8				-1.1	13.7	1.2	7.7	0.9	-0.0	-1.4	-8.8	-1.5	6.5	1.1	0.0	
Earthquake Y Mode 9				0.2	10.3	-0.2	5.9	-0.2	-0.0	-0.0	-6.9	0.3	5.0	-0.2	-0.0	
W54	techo	30.0	12.00/15.00	Self weight	43.4	1.2	0.3	0.6	-1.1	-0.2	23.0	-0.7	3.7	1.0	-0.8	-0.5
				Dead load	10.5	0.7	8.9	0.5	8.8	0.0	9.4	-0.7	-16.1	0.5	5.1	-0.2
				Live load	12.8	0.5	-1.8	0.2	-0.9	-0.1	12.2	-0.2	0.8	0.3	-1.0	-0.2
				Wind +X ecc.+	-1.8	1.1	-1.0	1.0	-0.9	-0.1	-1.5	-1.9	1.6	1.4	-0.5	-0.1
				Wind +X ecc.-	-2.0	1.2	-0.9	1.0	-0.5	-0.0	-1.7	-1.9	0.5	1.5	-0.4	-0.1
				Wind -X ecc.+	1.8	-1.1	1.0	-1.0	0.9	0.1	1.5	1.9	-1.6	-1.4	0.5	0.1
				Wind -X ecc.-	2.0	-1.2	0.9	-1.0	0.5	0.0	1.7	1.9	-0.5	-1.5	0.4	0.1
				Wind +Y ecc.+	-1.6	0.3	1.1	0.2	4.8	0.1	-1.6	-0.4	-12.9	0.3	1.8	0.1
				Wind +Y ecc.-	-0.6	0.1	0.7	0.1	3.0	0.0	-0.7	-0.1	-7.8	0.1	1.1	-0.0
				Wind -Y ecc.+	1.6	-0.3	-1.1	-0.2	-4.8	-0.1	1.6	0.4	12.9	-0.3	-1.8	-0.1
				Wind -Y ecc.-	0.6	-0.1	-0.7	-0.1	-3.0	-0.0	0.7	0.1	7.8	-0.1	-1.1	0.0
				Earthquake X Mode 1	-12.7	4.9	2.4	4.1	11.1	0.4	-11.7	-8.0	-29.7	6.0	4.1	0.2
				Earthquake X Mode 2	12.0	-15.1	21.1	-12.8	28.2	1.6	8.6	25.1	-60.4	-19.5	13.6	2.5
				Earthquake X Mode 3	-1.6	0.6	0.7	0.5	3.0	-0.0	-1.6	-0.9	-7.9	0.7	1.1	-0.1
				Earthquake X Mode 4	3.0	-1.0	-4.3	-0.8	-3.8	-0.1	2.8	1.5	6.8	-1.1	-2.2	-0.0
				Earthquake X Mode 5	5.3	3.7	-7.9	3.0	-7.1	-0.4	5.6	-5.7	12.6	4.5	-4.1	-0.6
				Earthquake X Mode 6	0.9	-0.1	-1.4	-0.1	-1.3	-0.0	0.9	0.1	2.4	-0.1	-0.7	-0.0
				Earthquake X Mode 7	-0.5	0.2	1.8	0.2	1.0	0.0	-0.5	-0.3	-1.2	0.2	0.7	0.0
				Earthquake X Mode 8	-1.1	0.2	3.4	0.1	2.1	0.0	-1.1	-0.2	-2.6	0.2	1.4	-0.0
				Earthquake X Mode 9	3.0	0.9	-5.1	0.7	-3.3	-0.1	3.0	-1.4	4.5	1.1	-2.2	-0.1
				Earthquake Y Mode 1	-5.7	2.2	1.1	1.9	5.0	0.2	-5.3	-3.6	-13.5	2.7	1.9	0.1
				Earthquake Y Mode 2	3.7	-4.7	6.5	-3.9	8.7	0.5	2.6	7.8	-18.7	-6.0	4.2	0.8
Earthquake Y Mode 3	-9.9	3.7	4.5	3.1	18.4	-0.2	-9.6	-5.8	-48.7	4.3	7.0	-0.5				
Earthquake Y Mode 4	0.6	-0.2	-0.8	-0.1	-0.7	-0.0	0.5	0.3	1.3	-0.2	-0.4	-0.0				
Earthquake Y Mode 5	1.0	0.7	-1.4	0.5	-1.3	-0.1	1.0	-1.0	2.3	0.8	-0.7	-0.1				
Earthquake Y Mode 6	7.3	-0.5	-11.5	-0.4	-10.7	-0.0	7.0	0.8	19.6	-0.5	-6.1	-0.0				
Earthquake Y Mode 7	-0.2	0.1	0.5	0.0	0.3	0.0	-0.1	-0.1	-0.4	0.1	0.2	0.0				
Earthquake Y Mode 8	-2.8	0.4	8.5	0.3	5.2	0.0	-2.7	-0.5	-6.6	0.4	3.5	-0.0				
Earthquake Y Mode 9	1.1	0.3	-1.9	0.3	-1.2	-0.0	1.1	-0.5	1.6	0.4	-0.8	-0.1				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 4	30.0	9.00/12.00	Self weight	86.5	2.0	-2.0	1.6	-0.9	-0.1	64.7	-2.8	0.4	2.0	-1.0	-0.5				
				Dead load	35.8	0.8	4.2	0.6	2.2	0.0	33.7	-1.1	-2.8	0.8	0.2	-0.2				
				Live load	19.6	1.0	-1.7	0.8	-1.0	-0.0	18.9	-1.5	1.2	1.1	-0.5	-0.2				
				Wind +X ecc.+	2.2	1.4	-1.1	1.0	-0.8	-0.1	2.1	-2.0	1.4	1.8	-0.4	-0.4				
				Wind +X ecc.-	1.5	1.4	-0.6	1.1	-0.1	-0.1	1.4	-2.1	-0.4	1.8	-0.1	-0.4				
				Wind -X ecc.+	-2.2	-1.4	1.1	-1.0	0.8	0.1	-2.1	2.0	-1.4	-1.8	0.4	0.4				
				Wind -X ecc.-	-1.5	-1.4	0.6	-1.1	0.1	0.1	-1.4	2.1	0.4	-1.8	0.1	0.4				
				Wind +Y ecc.+	-7.1	0.2	5.5	0.2	8.8	0.2	-6.5	-0.2	-20.2	-0.1	3.5	0.1				
				Wind +Y ecc.-	-4.0	0.0	3.3	0.0	5.3	0.0	-3.6	0.0	-12.1	-0.2	2.1	0.0				
				Wind -Y ecc.+	7.1	-0.2	-5.5	-0.2	-8.8	-0.2	6.5	0.2	20.2	0.1	-3.5	-0.1				
				Wind -Y ecc.-	4.0	-0.0	-3.3	-0.0	-5.3	-0.0	3.6	-0.0	12.1	0.2	-2.1	-0.0				
				Earthquake X Mode 1	-14.7	5.6	14.9	4.3	20.6	0.5	-13.3	-7.9	-45.1	6.3	8.3	-0.7				
				Earthquake X Mode 2	-58.3	-17.6	34.7	-13.3	35.6	2.6	-55.1	26.1	-70.1	-23.7	15.8	6.4				
				Earthquake X Mode 3	-3.7	0.6	4.1	0.5	5.5	-0.0	-3.3	-0.8	-12.0	0.6	2.3	-0.2				
				Earthquake X Mode 4	3.9	-0.8	-6.9	-0.6	-3.4	-0.1	3.6	1.0	3.2	-0.8	-1.8	0.1				
				Earthquake X Mode 5	18.7	2.7	-9.4	2.0	-5.2	-0.4	17.9	-3.8	6.3	3.6	-2.7	-1.0				
				Earthquake X Mode 6	1.8	-0.0	-2.3	-0.0	-1.2	-0.0	1.7	0.0	1.3	-0.0	-0.6	0.0				
				Earthquake X Mode 7	-0.5	0.0	0.6	-0.0	-0.3	-0.0	-0.4	0.0	1.3	-0.0	-0.2	-0.0				
				Earthquake X Mode 8	-1.4	-0.0	1.4	-0.0	-0.4	0.0	-1.3	0.0	2.2	-0.0	-0.2	-0.0				
				Earthquake X Mode 9	4.4	-0.1	-1.4	-0.1	0.7	-0.0	4.2	0.2	-3.1	-0.1	0.5	-0.1				
				Earthquake Y Mode 1	-6.7	2.5	6.8	2.0	9.4	0.2	-6.0	-3.6	-20.5	2.9	3.7	-0.3				
				Earthquake Y Mode 2	-18.0	-5.4	10.7	-4.1	11.0	0.8	-17.0	8.1	-21.7	-7.3	4.9	2.0				
				Earthquake Y Mode 3	-22.9	3.7	25.1	2.9	34.1	-0.1	-20.6	-5.1	-74.0	3.5	13.9	-1.1				
				Earthquake Y Mode 4	0.7	-0.1	-1.3	-0.1	-0.7	-0.0	0.7	0.2	0.6	-0.2	-0.3	0.0				
				Earthquake Y Mode 5	3.4	0.5	-1.7	0.4	-0.9	-0.1	3.3	-0.7	1.1	0.6	-0.5	-0.2				
				Earthquake Y Mode 6	14.6	-0.4	-18.9	-0.3	-10.0	-0.1	13.6	0.4	10.9	-0.1	-5.3	0.1				
				Earthquake Y Mode 7	-0.1	0.0	0.2	-0.0	-0.1	-0.0	-0.1	0.0	0.4	-0.0	-0.1	-0.0				
				Earthquake Y Mode 8	-3.4	-0.0	3.4	-0.0	-0.9	0.0	-3.1	0.1	5.4	-0.1	-0.6	-0.0				
				Earthquake Y Mode 9	1.6	-0.0	-0.5	-0.0	0.3	-0.0	1.5	0.1	-1.1	-0.1	0.2	-0.0				
					Floor 3	30.0	6.00/9.00	Self weight	127.1	1.6	-1.9	1.3	-0.4	-0.1	104.2	-2.3	-0.6	1.7	-0.5	-0.5
								Dead load	62.3	0.7	4.1	0.6	3.1	0.0	59.4	-1.0	-4.9	0.7	1.1	-0.2
								Live load	26.1	0.9	-1.8	0.7	-0.8	-0.0	25.3	-1.2	0.6	0.9	-0.4	-0.3
								Wind +X ecc.+	7.4	1.9	-1.3	1.4	-1.0	-0.2	7.2	-2.8	1.8	2.4	-0.6	-0.6
								Wind +X ecc.-	5.7	1.9	-0.2	1.5	0.1	-0.1	5.6	-2.8	-0.5	2.4	-0.0	-0.5
								Wind -X ecc.+	-7.4	-1.9	1.3	-1.4	1.0	0.2	-7.2	2.8	-1.8	-2.4	0.6	0.6
								Wind -X ecc.-	-5.7	-1.9	0.2	-1.5	-0.1	0.1	-5.6	2.8	0.5	-2.4	0.0	0.5
Wind +Y ecc.+	-18.4	0.1	12.8					0.1	13.4	0.3	-17.2	0.0	-26.4	-0.4	5.8	0.3				
Wind +Y ecc.-	-10.7	-0.1	7.6					-0.1	8.0	0.1	-10.1	0.2	-16.0	-0.4	3.5	0.0				
Wind -Y ecc.+	18.4	-0.1	-12.8					-0.1	-13.4	-0.3	17.2	-0.0	26.4	0.4	-5.8	-0.3				
Wind -Y ecc.-	10.7	0.1	-7.6					0.1	-8.0	-0.1	10.1	-0.2	16.0	0.4	-3.5	-0.0				
Earthquake X Mode 1	-24.7	6.7	31.4					5.1	28.6	0.7	-22.6	-9.4	-52.5	7.4	12.5	-0.7				
Earthquake X Mode 2	-152.8	-22.4	53.6					-17.0	45.9	3.1	-146.6	33.2	-82.1	-30.1	21.5	7.8				
Earthquake X Mode 3	-8.5	0.6	8.2					0.5	7.6	-0.0	-7.9	-0.8	-14.2	0.5	3.3	-0.2				
Earthquake X Mode 4	4.0	-0.3	-4.8					-0.2	-0.4	-0.0	3.7	0.2	-3.1	-0.2	-0.2	0.1				
Earthquake X Mode 5	24.5	0.5	-5.4					0.3	-0.9	-0.1	23.7	-0.6	-2.2	0.7	-0.3	-0.4				
Earthquake X Mode 6	2.2	-0.0	-1.6					-0.0	-0.2	-0.0	2.0	0.0	-0.8	0.0	-0.1	0.0				
Earthquake X Mode 7	-0.1	-0.2	-1.5					-0.1	-1.1	-0.0	-0.1	0.2	1.6	-0.2	-0.7	-0.0				
Earthquake X Mode 8	-0.5	-0.1	-2.9					-0.1	-2.2	-0.0	-0.5	0.1	3.3	-0.1	-1.4	0.0				
Earthquake X Mode 9	1.0	-0.8	4.3					-0.6	3.2	0.1	1.1	1.2	-4.8	-1.1	2.0	0.2				
Earthquake Y Mode 1	-11.2	3.0	14.3					2.3	13.0	0.3	-10.2	-4.3	-23.8	3.4	5.7	-0.3				
Earthquake Y Mode 2	-47.2	-6.9	16.5					-5.3	14.2	1.0	-45.3	10.3	-25.4	-9.3	6.6	2.4				
Earthquake Y Mode 3	-52.4	3.9	50.7					3.0	47.1	-0.0	-48.5	-5.1	-87.6	3.3	20.5	-1.1				
Earthquake Y Mode 4	0.8	-0.0	-0.9					-0.0	-0.1	-0.0	0.7	0.0	-0.6	-0.0	-0.0	0.0				
Earthquake Y Mode 5	4.5	0.1	-1.0					0.1	-0.2	-0.0	4.3	-0.1	-0.4	0.1	-0.1	-0.1				
Earthquake Y Mode 6	17.8	-0.2	-13.5					-0.1	-1.9	-0.0	16.8	0.1	-6.6	0.0	-1.0	0.0				
Earthquake Y Mode 7	-0.0	-0.0	-0.5					-0.0	-0.3	-0.0	-0.0	0.1	0.5	-0.1	-0.2	-0.0				
Earthquake Y Mode 8	-1.1	-0.3	-7.2					-0.2	-5.4	-0.0	-1.1	0.4	8.3	-0.3	-3.5	0.0				
Earthquake Y Mode 9	0.4	-0.3	1.6					-0.2	1.2	0.0	0.4	0.4	-1.8	-0.4	0.7	0.1				
	Floor 2	30.0	3.00/6.00					Self weight	164.8	1.3	-1.5	1.0	-0.0	-0.1	140.9	-1.8	-1.3	1.3	-0.1	-0.4
								Dead load	88.5	0.7	4.0	0.5	2.8	0.0	84.8	-0.9	-4.1	0.6	1.0	-0.2
								Live load	31.2	0.7	-1.7	0.6	-0.6	-0.0	30.3	-1.0	0.2	0.7	-0.3	-0.2
								Wind +X ecc.+	13.8	2.2	-1.3	1.6	-1.0	-0.2	13.4	-3.1	1.8	2.7	-0.6	-0.6
								Wind +X ecc.-	10.7	2.2	0.8	1.7	0.5	-0.1	10.5	-3.1	-0.5	2.7	0.2	-0.6
								Wind -X ecc.+	-13.8	-2.2	1.3	-1.6	1.0	0.2	-13.4	3.1	-1.8	-2.7	0.6	0.6
								Wind -X ecc.-	-10.7	-2.2	-0.8	-1.7	-0.5	0.1	-10.5	3.1	0.5	-2.7	-0.2	0.6
				Wind +Y ecc.+	-34.7	-0.1	24.0	-0.0	17.6	0.4	-32.9	0.3	-28.0	-0.7	8.5	0.3				
				Wind +Y ecc.-	-20.8	-0.2	14.0	-0.2	10.7	0.1	-19.7	0.4	-17.4	-0.6	5.1	0.1				
				Wind -Y ecc.+	34.7	0.1	-24.0	0.0	-17.6	-0.4	32.9	-0.3	28.0	0.7	-8.5	-0.3				
				Wind -Y ecc.-	20.8	0.2	-14.0	0.2	-10.7	-0.1	19.7	-0.4	17.4	0.6	-5.1	-0.1				
				Earthquake X Mode 1	-40.3	6.8	52.4	5.1	33.7	0.8	-37.3	-9.2	-47.3	7.3	16.3	-0.7				
				Earthquake X Mode 2	-262.0	-23.9	72.7	-17.7	50.0	3.1	-252.6	34.2	-76.1	-31.4	24.6	8.3				
				Earthquake X Mode 3	-15.3	0.6	13.2	0.4	9.1	0.0	-14.4	-0.7	-13.6	0.4	4.3	-0.2				
				Earthquake X Mode 4	2.6	0.4	1.6	0.3	3.2	0.1	2.5	-0.6	-7.4	0.4	1.9	0.0				
				Earthquake X Mode 5	19.3	-2.0	3.0	-1.5	4.4	0.2	18.7	3.0	-9.3	-2.5	2.7	0.4				
				Earthquake X Mode 6	1.6	0.0	0.4	0.0	1.0	0.0	1.6	-0.0	-2.4	-0.0	0.6	0.0				
				Earthquake X Mode 7	0.0	-0.0	-0.9	-0.0	-0.0	-0.0	-0.0	0.0	-0.8	-0.0	0.0	0.0				
				Earthquake X Mode 8	0.2	-0.0	-1.9	-0.0	-0.2	-0.0	0.1	-0.0	-1.1	0.0	-0.1	0.0				
				Earthquake X Mode 9	-1.2	-0.1	2.3	-0.1	0.2	0.0	-1.1	0.1	1.4	-0.2	0.1	0.1				
				Earthquake Y Mode 1	-18.3	3.1	23.8	2.3	15.3	0.4	-16.9	-4.2	-21.5	3.3	7.4	-0.3				
				Earthquake Y Mode 2	-80.9	-7.4	22.4	-5.5	15.4	1.0	-78.0	10.6	-23.5	-9.7	7.6	2.6				
				Earthquake Y Mode 3	-94.2	3.5	81.4	2.7	55.7	0.0	-88.6	-4.2	-83.5	2.4	26.4	-1.0				
				Earthquake Y Mode 4	0.5	0.1	0.3	0.1	0.6	0.0	0.5	-0.1	-1.4	0.1	0.4	0.0				
				Earthquake Y Mode 5	3.5	-0.4	0.5	-0.3	0.8	0.0	3.4	0.5	-1.7	-0.5	0.5	0.1				
				Earthquake Y Mode 6	13.2	0.0	3.6	0.0	8.5	0.0	12.8	-0.1	-20.0	-0.0	4.9	0.0				
				Earthquake Y Mode 7	0.0	-0.0	-0.3	-0.0	-0.0	-0.0	-0.0	0.0	-0.2	-0.0	0.0	0.0				
				Earthquake Y Mode 8	0.5	-0.0	-4.8	-0.0	-0.5	-0.0	0.3	-0.0	-2.8	0.0	-0.3	0.0				
				Earthquake Y Mode 9	-0.4	-0.0	0.9	-0.0	0.1	0.0	-0.4	0.0	0.5	-0.1	0.0	0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 1	30.0	0.00/3.00	Self weight	197.2	0.5	1.7	0.5	0.4	-0.0	172.3	-1.0	0.8	0.6	0.8	-0.2				
				Dead load	114.0	0.3	3.2	0.3	2.2	0.0	109.7	-0.5	-3.1	0.3	0.8	-0.1				
				Live load	33.3	0.3	0.5	0.3	-0.3	-0.0	32.3	-0.6	1.4	0.3	0.3	-0.1				
				Wind +X ecc.+	19.5	1.6	-0.7	1.2	-0.7	-0.1	19.0	-2.1	1.3	2.0	-0.3	-0.5				
				Wind +X ecc.-	15.1	1.7	3.5	1.2	1.1	-0.1	14.7	-2.1	0.2	1.9	0.8	-0.5				
				Wind -X ecc.+	-19.5	-1.6	0.7	-1.2	0.7	0.1	-19.0	2.1	-1.3	-2.0	0.3	0.5				
				Wind -X ecc.-	-15.1	-1.7	-3.5	-1.2	-1.1	0.1	-14.7	2.1	-0.2	-1.9	-0.8	0.5				
				Wind +Y ecc.+	-53.0	-0.0	54.1	-0.1	23.9	0.2	-50.6	0.4	-16.8	-0.7	15.2	0.2				
				Wind +Y ecc.-	-32.5	-0.2	34.6	-0.1	15.6	0.0	-31.0	0.5	-11.7	-0.6	9.9	0.1				
				Wind -Y ecc.+	53.0	0.0	-54.1	0.1	-23.9	-0.2	50.6	-0.4	16.8	0.7	-15.2	-0.2				
				Wind -Y ecc.-	32.5	0.2	-34.6	0.1	-15.6	-0.0	31.0	-0.5	11.7	0.6	-9.9	-0.1				
				Earthquake X Mode 1	-57.5	4.8	93.7	3.3	37.2	0.5	-54.0	-5.5	-17.4	4.5	23.4	-0.6				
				Earthquake X Mode 2	-357.7	-16.1	109.9	-11.4	49.3	1.9	-345.9	21.6	-37.9	-20.7	29.4	6.0				
				Earthquake X Mode 3	-22.9	0.4	27.0	0.3	11.5	0.0	-21.7	-0.3	-7.3	0.1	7.3	-0.1				
				Earthquake X Mode 4	0.4	0.5	10.3	0.4	5.2	0.1	0.5	-0.6	-4.8	0.5	3.4	-0.0				
				Earthquake X Mode 5	8.2	-2.2	12.5	-1.7	6.7	0.2	8.1	3.2	-7.2	-2.9	4.4	0.7				
				Earthquake X Mode 6	0.4	0.0	3.6	0.0	1.9	0.0	0.5	-0.0	-1.9	-0.0	1.2	0.0				
				Earthquake X Mode 7	-0.2	0.1	2.0	0.1	1.3	0.0	-0.2	-0.2	-1.5	0.1	0.9	0.0				
				Earthquake X Mode 8	-0.4	0.1	3.9	0.1	2.5	0.0	-0.4	-0.1	-3.2	0.1	1.8	-0.0				
				Earthquake X Mode 9	1.1	0.6	-5.3	0.5	-3.4	-0.0	1.0	-0.9	4.5	0.8	-2.4	-0.1				
				Earthquake Y Mode 1	-26.1	2.2	42.5	1.5	16.9	0.2	-24.5	-2.5	-7.9	2.0	10.6	-0.3				
				Earthquake Y Mode 2	-110.5	-5.0	34.0	-3.5	15.2	0.6	-106.8	6.7	-11.7	-6.4	9.1	1.8				
				Earthquake Y Mode 3	-140.8	2.4	166.2	1.5	71.0	0.0	-133.7	-1.9	-44.8	0.8	44.7	-0.7				
				Earthquake Y Mode 4	0.1	0.1	2.0	0.1	1.0	0.0	0.1	-0.1	-0.9	0.1	0.7	-0.0				
				Earthquake Y Mode 5	1.5	-0.4	2.3	-0.3	1.2	0.0	1.5	0.6	-1.3	-0.5	0.8	0.1				
				Earthquake Y Mode 6	3.6	0.2	29.9	0.1	15.6	0.0	3.9	-0.0	-15.5	-0.1	10.2	0.0				
				Earthquake Y Mode 7	-0.1	0.0	0.6	0.0	0.4	0.0	-0.1	-0.1	-0.5	0.0	0.3	0.0				
				Earthquake Y Mode 8	-1.1	0.2	9.8	0.2	6.2	0.0	-1.1	-0.3	-7.9	0.2	4.4	-0.0				
				Earthquake Y Mode 9	0.4	0.2	-1.9	0.2	-1.3	-0.0	0.4	-0.3	1.6	0.3	-0.9	-0.0				
				W55	techo	30.0	12.00/15.00	Self weight	49.9	1.5	-6.5	0.8	-7.1	-0.2	28.8	-1.4	13.8	1.6	-3.4	-0.6
								Dead load	7.0	0.5	-1.0	0.3	-1.0	-0.0	6.8	-0.4	1.7	0.6	-0.7	-0.2
								Live load	11.7	0.6	-4.7	0.3	-4.3	-0.1	11.4	-0.5	7.8	0.6	-2.2	-0.3
								Wind +X ecc.+	-2.0	1.2	0.2	1.0	0.2	-0.0	-1.8	-2.0	-0.4	1.6	0.0	-0.1
Wind +X ecc.-	-1.7	1.1	0.3					0.9	0.6	-0.0	-1.6	-1.9	-1.6	1.4	0.2	-0.1				
Wind -X ecc.+	2.0	-1.2	-0.2					-1.0	-0.2	0.0	1.8	2.0	0.4	-1.6	-0.0	0.1				
Wind -X ecc.-	1.7	-1.1	-0.3					-0.9	-0.6	0.0	1.6	1.9	1.6	-1.4	-0.2	0.1				
Wind +Y ecc.+	2.3	-0.7	1.1					-0.6	4.9	0.2	1.5	1.1	-12.9	-0.9	1.7	0.2				
Wind +Y ecc.-	1.0	-0.3	0.6					-0.2	2.9	0.0	0.6	0.4	-7.7	-0.3	1.0	0.0				
Wind -Y ecc.+	-2.3	0.7	-1.1					0.6	-4.9	-0.2	-1.5	-1.1	12.9	0.9	-1.7	-0.2				
Wind -Y ecc.-	-1.0	0.3	-0.6					0.2	-2.9	-0.0	-0.6	-0.4	7.7	0.3	-1.0	-0.0				
Earthquake X Mode 1	3.2	1.7	6.7					1.5	15.3	0.7	1.3	-3.0	-37.0	2.2	5.9	0.8				
Earthquake X Mode 2	30.6	-19.2	5.1					-16.0	13.3	1.3	26.3	31.7	-32.8	-25.0	6.0	2.3				
Earthquake X Mode 3	0.7	0.3	1.1					0.3	3.4	-0.0	0.2	-0.5	-8.7	0.4	1.3	-0.0				
Earthquake X Mode 4	-3.3	-0.5	-5.0					-0.4	-4.5	-0.1	-2.7	0.8	7.8	-0.6	-2.4	-0.1				
Earthquake X Mode 5	-0.7	4.3	-5.5					3.4	-4.7	-0.3	-0.1	-6.8	8.1	5.5	-2.7	-0.6				
Earthquake X Mode 6	-0.9	-0.0	-1.4					-0.0	-1.3	-0.0	-0.7	0.0	2.4	-0.0	-0.7	-0.0				
Earthquake X Mode 7	0.8	0.1	1.9					0.1	1.1	0.0	0.7	-0.2	-1.4	0.1	0.7	0.0				
Earthquake X Mode 8	1.4	0.1	3.5					0.1	2.2	0.0	1.2	-0.2	-2.7	0.2	1.4	-0.0				
Earthquake X Mode 9	0.0	1.1	-4.8					0.8	-2.9	-0.1	0.2	-1.6	3.5	1.3	-1.9	-0.1				
Earthquake Y Mode 1	1.5	0.8	3.1					0.7	6.9	0.3	0.6	-1.4	-16.8	1.0	2.7	0.3				
Earthquake Y Mode 2	9.4	-5.9	1.6					-4.9	4.1	0.4	8.1	9.8	-10.1	-7.7	1.9	0.7				
Earthquake Y Mode 3	4.1	1.8	7.0					1.6	21.1	-0.0	1.5	-3.3	-53.4	2.4	7.9	-0.1				
Earthquake Y Mode 4	-0.6	-0.1	-1.0					-0.1	-0.9	-0.0	-0.5	0.2	1.5	-0.1	-0.5	-0.0				
Earthquake Y Mode 5	-0.1	0.8	-1.0					0.6	-0.9	-0.1	-0.0	-1.2	1.5	1.0	-0.5	-0.1				
Earthquake Y Mode 6	-7.1	-0.3	-11.8					-0.2	-11.0	-0.1	-5.7	0.4	19.8	-0.3	-5.9	-0.0				
Earthquake Y Mode 7	0.3	0.0	0.6					0.0	0.3	0.0	0.2	-0.0	-0.4	0.0	0.2	0.0				
Earthquake Y Mode 8	3.5	0.4	8.8					0.3	5.4	0.0	3.0	-0.5	-6.8	0.4	3.5	-0.0				
Earthquake Y Mode 9	0.0	0.4	-1.7					0.3	-1.1	-0.0	0.1	-0.6	1.3	0.5	-0.7	-0.1				
	Floor 4	30.0	9.00/12.00					Self weight	92.0	2.2	-7.7	1.7	-5.9	-0.2	71.9	-3.2	9.9	2.4	-3.2	-0.4
								Dead load	38.8	0.9	-3.4	0.7	-3.7	-0.0	37.2	-1.3	8.0	1.0	-2.7	-0.1
								Live load	19.3	1.2	-2.7	0.9	-1.6	-0.1	19.4	-1.7	2.3	1.3	-0.7	-0.2
								Wind +X ecc.+	2.2	1.4	0.1	1.1	0.1	-0.1	2.1	-2.2	-0.2	1.8	-0.0	-0.3
				Wind +X ecc.-	2.7	1.3	0.6	1.0	0.9	-0.0	2.6	-2.0	-2.1	1.7	0.4	-0.2				
				Wind -X ecc.+	-2.2	-1.4	-0.1	-1.1	-0.1	0.1	-2.1	2.2	0.2	-1.8	0.0	0.3				
				Wind -X ecc.-	-2.7	-1.3	-0.6	-1.0	-0.9	0.0	-2.6	2.0	2.1	-1.7	-0.4	0.2				
				Wind +Y ecc.+	6.2	-0.7	5.5	-0.5	9.0	0.3	5.9	1.1	-21.5	-1.0	4.1	0.3				
				Wind +Y ecc.-	3.7	-0.3	3.2	-0.2	5.3	0.0	3.5	0.4	-12.8	-0.4	2.4	0.0				
				Wind -Y ecc.+	-6.2	0.7	-5.5	0.5	-9.0	-0.3	-5.9	-1.1	21.5	1.0	-4.1	-0.3				
				Wind -Y ecc.-	-3.7	0.3	-3.2	0.2	-5.3	-0.0	-3.5	-0.4	12.8	0.4	-2.4	-0.0				
				Earthquake X Mode 1	27.2	2.3	19.2	1.8	24.3	1.0	25.8	-3.3	-53.9	2.5	11.4	0.5				
				Earthquake X Mode 2	-15.1	-21.6	19.8	-16.5	24.7	1.9	-15.4	32.3	-53.4	-27.1	12.3	5.2				
				Earthquake X Mode 3	5.7	0.4	4.5	0.3	5.9	0.0	5.3	-0.5	-13.4	0.4	2.8	-0.1				
				Earthquake X Mode 4	-8.0	-0.4	-7.4	-0.3	-3.8	-0.1	-7.4	0.5	4.0	-0.4	-2.1	-0.0				
				Earthquake X Mode 5	7.6	3.2	-8.0	2.3	-4.0	-0.3	7.9	-4.5	3.8	3.9	-2.3	-0.8				
				Earthquake X Mode 6	-1.9	-0.0	-2.4	-0.0	-1.3	-0.0	-1.8	0.0	1.4	-0.0	-0.7	0.0				
				Earthquake X Mode 7	1.1	-0.0	0.6	-0.0	-0.3	-0.0	1.0	0.0	1.4	-0.0	-0.2	-0.0				
				Earthquake X Mode 8	1.9	-0.0	1.4	-0.0	-0.4	0.0	1.7	0.1	2.3	-0.0	-0.3	-0.0				
				Earthquake X Mode 9	0.8	-0.1	-1.6	-0.1	0.7	-0.0	1.0	0.2	-3.4	-0.2	0.5	-0.1				
				Earthquake Y Mode 1	12.4	1.1	8.7	0.8	11.0	0.4	11.7	-1.5	-24.5	1.1	5.2	0.2				
				Earthquake Y Mode 2	-4.7	-6.7	6.1	-5.1	7.6	0.6	-4.8	10.0	-16.5	-8.4	3.8	1.6				
				Earthquake Y Mode 3	34.8	2.3	27.5	1.8	36.4	0.1	32.9	-3.2	-82.3	2.3	17.2	-0.7				
				Earthquake Y Mode 4	-1.5	-0.1	-1.4	-0.1	-0.7	-0.0	-1.4	0.1	0.8	-0.1	-0.4	-0.0				
				Earthquake Y Mode 5	1.4	0.6	-1.5	0.4	-0.7	-0.0	1.4	-0.8	0.7	0.7	-0.4	-0.2				
				Earthquake Y Mode 6	-16.0	-0.2	-19.5	-0.1	-10.4	-0.1	-14.8	0.1	11.7	-0.0	-5.8	0.1				
				Earthquake Y Mode 7	0.3	-0.0	0.2	-0.0	-0.1	-0.0	0.3	0.0	0.4	-0.0	-0.1	-0.0				
				Earthquake Y Mode 8	4.8	-0.1	3.5	-0.1	-0.9	0.0	4.2	0.1	5.8	-0.1	-0.7	-0.0				
				Earthquake Y Mode 9	0.3	-0.0	-0.6	-0.0	0.2	-0.0	0.4	0.1	-1.2	-0.1	0.2	-0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 3	30.0	6.00/9.00	Self weight	134.1	1.8	-6.0	1.4	-3.9	-0.2	114.0	-2.7	5.3	2.0	-2.0	-0.4
				Dead load	68.5	0.7	-3.2	0.6	-3.0	-0.1	67.1	-1.1	5.9	0.8	-2.1	-0.1
				Live load	27.4	1.0	-2.8	0.8	-1.8	-0.1	27.3	-1.4	2.6	1.0	-1.0	-0.2
				Wind +X ecc.+	7.9	2.0	0.1	1.5	0.1	-0.1	7.7	-3.0	-0.3	2.5	-0.0	-0.4
				Wind +X ecc.-	9.1	1.9	1.2	1.4	1.3	-0.0	8.9	-2.8	-2.7	2.3	0.6	-0.3
				Wind -X ecc.+	-7.9	-2.0	-0.1	-1.5	-0.1	0.1	-7.7	3.0	0.3	-2.5	0.0	0.4
				Wind -X ecc.-	-9.1	-1.9	-1.2	-1.4	-1.3	0.0	-8.9	2.8	2.7	-2.3	-0.6	0.3
				Wind +Y ecc.+	15.1	-0.8	12.9	-0.6	13.6	0.3	14.3	1.2	-28.0	-1.2	6.5	0.3
				Wind +Y ecc.-	9.5	-0.2	7.5	-0.2	8.1	0.1	9.0	0.4	-16.8	-0.4	3.9	-0.0
				Wind -Y ecc.+	-15.1	0.8	-12.9	0.6	-13.6	-0.3	-14.3	-1.2	28.0	1.2	-6.5	-0.3
				Wind -Y ecc.-	-9.5	0.2	-7.5	0.2	-8.1	-0.1	-9.0	-0.4	16.8	0.4	-3.9	0.0
				Earthquake X Mode 1	65.1	3.5	36.7	2.6	33.0	1.2	62.3	-4.8	-62.9	3.6	16.1	0.5
				Earthquake X Mode 2	-65.3	-26.6	37.3	-20.3	33.0	2.3	-66.5	39.8	-60.1	-33.4	16.6	6.2
				Earthquake X Mode 3	13.8	0.6	8.7	0.4	8.1	0.0	13.1	-0.7	-15.7	0.5	3.9	-0.2
				Earthquake X Mode 4	-9.9	-0.1	-5.0	-0.0	-0.6	-0.0	-9.4	0.0	-3.0	-0.0	-0.3	0.0
				Earthquake X Mode 5	11.5	0.7	-5.2	0.4	-0.4	-0.1	12.0	-0.8	-4.0	0.8	-0.2	-0.3
				Earthquake X Mode 6	-2.4	-0.0	-1.7	0.0	-0.2	-0.0	-2.2	-0.0	-0.9	0.0	-0.1	0.0
				Earthquake X Mode 7	0.3	-0.1	-1.6	-0.1	-1.2	-0.0	0.3	0.1	1.8	-0.1	-0.8	-0.0
				Earthquake X Mode 8	0.5	-0.1	-3.0	-0.1	-2.3	-0.0	0.5	0.2	3.6	-0.2	-1.5	0.0
				Earthquake X Mode 9	0.1	-0.9	4.0	-0.7	3.0	0.1	0.1	1.4	-4.6	-1.1	1.9	0.1
				Earthquake Y Mode 1	29.5	1.6	16.6	1.2	15.0	0.5	28.3	-2.2	-28.6	1.7	7.3	0.2
				Earthquake Y Mode 2	-20.2	-8.2	11.5	-6.3	10.2	0.7	-20.5	12.3	-18.6	-10.3	5.1	1.9
				Earthquake Y Mode 3	84.9	3.4	53.7	2.6	49.9	0.1	80.9	-4.6	-96.8	3.3	24.2	-1.0
				Earthquake Y Mode 4	-1.9	-0.0	-1.0	-0.0	-0.1	-0.0	-1.8	0.0	-0.6	-0.0	-0.1	0.0
				Earthquake Y Mode 5	2.1	0.1	-0.9	0.1	-0.1	-0.0	2.2	-0.1	-0.7	0.2	-0.0	-0.1
				Earthquake Y Mode 6	-19.9	-0.0	-13.8	0.0	-2.0	-0.0	-18.5	-0.2	-7.2	0.2	-1.0	0.0
				Earthquake Y Mode 7	0.1	-0.0	-0.5	-0.0	-0.4	-0.0	0.1	0.0	0.5	-0.0	-0.2	-0.0
				Earthquake Y Mode 8	1.3	-0.4	-7.4	-0.3	-5.6	-0.0	1.2	0.5	8.9	-0.4	-3.6	0.0
				Earthquake Y Mode 9	0.0	-0.3	1.5	-0.3	1.1	0.0	0.0	0.5	-1.7	-0.4	0.7	0.1
				Floor 2	30.0	3.00/6.00	Self weight	175.7	1.5	-2.9	1.2	-1.8	-0.1	155.3	-2.2	1.7
	Dead load	97.2	0.7				-3.1	0.5	-2.9	-0.0	95.7	-0.9	5.3	0.7	-1.9	-0.1
	Live load	35.1	0.9				-0.9	0.7	-0.4	-0.1	35.0	-1.2	0.2	0.9	-0.1	-0.1
	Wind +X ecc.+	14.9	2.3				-0.0	1.7	0.0	-0.1	14.7	-3.3	-0.3	2.8	-0.0	-0.5
	Wind +X ecc.-	17.1	2.2				2.2	1.6	1.6	-0.0	16.8	-3.1	-2.8	2.6	0.8	-0.4
	Wind -X ecc.+	-14.9	-2.3				0.0	-1.7	-0.0	0.1	-14.7	3.3	0.3	-2.8	0.0	0.5
	Wind -X ecc.-	-17.1	-2.2				-2.2	-1.6	-1.6	0.0	-16.8	3.1	2.8	-2.6	-0.8	0.4
	Wind +Y ecc.+	28.5	-0.7				24.0	-0.5	17.8	0.4	26.9	1.2	-29.4	-1.2	9.1	0.3
	Wind +Y ecc.-	18.1	-0.1				13.9	-0.1	10.6	0.0	17.2	0.3	-18.0	-0.4	5.4	-0.0
	Wind -Y ecc.+	-28.5	0.7				-24.0	0.5	-17.8	-0.4	-26.9	-1.2	29.4	1.2	-9.1	-0.3
	Wind -Y ecc.-	-18.1	0.1				-13.9	0.1	-10.6	-0.0	-17.2	-0.3	18.0	0.4	-5.4	0.0
	Earthquake X Mode 1	111.9	4.1				57.2	3.0	37.7	1.2	107.6	-5.2	-56.8	4.0	19.3	0.4
	Earthquake X Mode 2	-117.1	-27.8				58.6	-20.7	38.4	2.3	-119.6	40.1	-54.2	-34.2	20.3	6.5
	Earthquake X Mode 3	24.1	0.7				13.6	0.5	9.4	0.0	23.1	-0.8	-14.8	0.6	4.8	-0.2
	Earthquake X Mode 4	-7.6	0.3				1.8	0.3	3.4	0.1	-7.3	-0.5	-8.0	0.4	2.0	0.0
	Earthquake X Mode 5	9.9	-2.2				2.1	-1.7	3.8	0.1	10.1	3.3	-9.1	-2.7	2.3	0.3
Earthquake X Mode 6	-1.8	0.0	0.4				0.0	1.0	0.0	-1.7	-0.1	-2.6	0.0	0.6	-0.0	
Earthquake X Mode 7	-0.3	-0.0	-0.9				-0.0	-0.0	-0.0	-0.1	0.0	-0.8	-0.0	0.0	0.0	
Earthquake X Mode 8	-0.5	-0.0	-2.0				-0.0	-0.2	-0.0	-0.2	0.0	-1.2	-0.0	-0.1	0.0	
Earthquake X Mode 9	-0.5	-0.1	2.5				-0.1	0.2	0.0	-0.7	0.1	1.8	-0.1	0.1	0.1	
Earthquake Y Mode 1	50.8	1.9	25.9				1.4	17.1	0.5	48.8	-2.4	-25.8	1.8	8.8	0.2	
Earthquake Y Mode 2	-36.2	-8.6	18.1				-6.4	11.9	0.7	-37.0	12.4	-16.8	-10.6	6.3	2.0	
Earthquake Y Mode 3	148.5	4.1	83.7				3.0	57.9	0.1	142.3	-5.0	-91.2	3.7	29.3	-1.2	
Earthquake Y Mode 4	-1.5	0.1	0.3				0.0	0.7	0.0	-1.4	-0.1	-1.5	0.1	0.4	0.0	
Earthquake Y Mode 5	1.8	-0.4	0.4				-0.3	0.7	0.0	1.8	0.6	-1.7	-0.5	0.4	0.1	
Earthquake Y Mode 6	-14.9	0.3	3.4				0.2	8.5	0.0	-14.3	-0.4	-21.2	0.3	5.0	-0.0	
Earthquake Y Mode 7	-0.1	-0.0	-0.3				-0.0	-0.0	-0.0	-0.0	0.0	-0.2	-0.0	0.0	0.0	
Earthquake Y Mode 8	-1.1	-0.0	-5.0				-0.0	-0.6	-0.0	-0.6	0.0	-3.0	-0.0	-0.2	0.0	
Earthquake Y Mode 9	-0.2	-0.0	0.9				-0.0	0.1	0.0	-0.3	0.0	0.7	-0.0	0.0	0.0	
Floor 1	30.0	0.00/3.00	Self weight				215.5	0.6	2.1	0.6	0.8	-0.0	195.1	-1.2	-1.8	0.6
			Dead load	124.6	0.3	-0.8	0.3	-2.0	-0.0	123.2	-0.6	4.2	0.4	-0.7	-0.1	
			Live load	42.0	0.3	1.7	0.3	0.9	-0.0	41.8	-0.7	-1.3	0.4	0.8	-0.1	
			Wind +X ecc.+	21.3	1.7	-0.1	1.2	0.0	-0.1	21.2	-2.2	-0.4	1.9	-0.0	-0.4	
			Wind +X ecc.-	24.6	1.6	4.3	1.1	1.9	-0.0	24.3	-2.1	-1.6	1.8	1.4	-0.3	
			Wind -X ecc.+	-21.3	-1.7	0.1	-1.2	-0.0	0.1	-21.2	2.2	0.4	-1.9	0.0	0.4	
			Wind -X ecc.-	-24.6	-1.6	-4.3	-1.1	-1.9	0.0	-24.3	2.1	1.6	-1.8	-1.4	0.3	
			Wind +Y ecc.+	43.9	-0.3	55.4	-0.3	24.6	0.3	41.6	0.7	-18.7	-0.7	18.3	0.2	
			Wind +Y ecc.-	28.5	0.0	35.4	0.0	16.0	0.0	27.1	0.1	-12.8	-0.1	11.9	-0.0	
			Wind -Y ecc.+	-43.9	0.3	-55.4	0.3	-24.6	-0.3	-41.6	-0.7	18.7	0.7	-18.3	-0.2	
			Wind -Y ecc.-	-28.5	-0.0	-35.4	-0.0	-16.0	-0.0	-27.1	-0.1	12.8	0.1	-11.9	0.0	
			Earthquake X Mode 1	155.1	3.0	98.1	2.0	40.4	0.8	150.0	-3.3	-25.4	2.8	30.1	0.2	
			Earthquake X Mode 2	-155.2	-17.7	105.6	-12.7	43.5	1.4	-159.5	24.3	-23.4	-21.3	32.9	4.8	
			Earthquake X Mode 3	34.5	0.5	27.8	0.4	12.0	0.0	33.2	-0.6	-8.6	0.5	8.9	-0.1	
			Earthquake X Mode 4	-2.8	0.4	10.8	0.3	5.5	0.1	-3.1	-0.5	-5.6	0.4	4.1	0.0	
			Earthquake X Mode 5	5.4	-2.4	12.2	-1.8	6.2	0.2	5.3	3.5	-6.4	-3.0	4.7	0.5	
			Earthquake X Mode 6	-0.5	0.0	3.7	0.0	2.0	0.0	-0.6	-0.0	-2.1	0.0	1.4	-0.0	
			Earthquake X Mode 7	0.3	0.1	2.1	0.1	1.3	0.0	0.4	-0.1	-1.8	0.1	1.0	0.0	
			Earthquake X Mode 8	0.5	0.1	4.1	0.1	2.6	0.0	0.6	-0.1	-3.5	0.1	1.9	-0.0	
			Earthquake X Mode 9	-0.1	0.7	-5.3	0.5	-3.4	-0.0	-0.2	-1.0	4.5	0.8	-2.5	-0.1	
			Earthquake Y Mode 1	70.4	1.4	44.5	0.9	18.3	0.4	68.0	-1.5	-11.5	1.3	13.7	0.1	
			Earthquake Y Mode 2	-47.9	-5.5	32.6	-3.9	13.4	0.4	-49.3	7.5	-7.2	-6.6	10.2	1.5	
			Earthquake Y Mode 3	212.4	3.3	171.3	2.2	73.9	0.0	204.6	-3.5	-53.0	2.8	55.0	-0.9	
			Earthquake Y Mode 4	-0.5	0.1	2.1	0.1	1.1	0.0	-0.6	-0.1	-1.1	0.1	0.8	0.0	
			Earthquake Y Mode 5	1.0	-0.4	2.2	-0.3	1.1	0.0	1.0	0.6	-1.2	-0.5	0.8	0.1	
			Earthquake Y Mode 6	-4.5	0.3	30.7	0.2	16.1	0.0	-5.1	-0.4	-16.9	0.3	11.9	-0.1	
			Earthquake Y Mode 7	0.1	0.0	0.6	0.0	0.4	0.0	0.1	-0.0	-0.5	0.0	0.3	0.0	
Earthquake Y Mode 8	1.3	0.3	10.1	0.2	6.5	0.0	1.5	-0.4	-8.7	0.3	4.9	-0.0				
Earthquake Y Mode 9	-0.0	0.2	-1.9	0.2	-1.2	-0.0	-0.1	-0.4	1.6	0.3	-0.9	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
W56	techo	30.0	12.00/15.00	Self weight	72.7	46.7	1.7	43.6	0.1	-0.2	41.2	-77.9	1.4	23.2	-0.0	-0.3			
				Dead load	96.3	23.2	3.2	37.6	3.2	-0.2	89.9	-83.3	-6.5	16.0	3.9	-0.1			
				Live load	12.3	18.5	0.9	14.8	0.7	-0.1	11.3	-23.7	-1.0	8.5	0.7	-0.1			
				Wind +X ecc.+	-2.1	-3.0	0.1	1.1	0.1	-0.0	-2.0	-6.0	-0.2	0.0	0.1	-0.0			
				Wind +X ecc.-	-2.2	-3.0	0.3	1.2	0.2	-0.0	-2.1	-6.3	-0.4	0.1	0.2	0.0			
				Wind -X ecc.+	2.1	3.0	-0.1	-1.1	-0.1	0.0	2.0	6.0	0.2	-0.0	-0.1	0.0			
				Wind -X ecc.-	2.2	3.0	-0.3	-1.2	-0.2	0.0	2.1	6.3	0.4	-0.1	-0.2	-0.0			
				Wind +Y ecc.+	-1.7	0.9	2.6	1.0	2.1	-0.0	-1.6	-2.1	-3.8	0.6	2.6	0.0			
				Wind +Y ecc.-	-1.2	0.8	2.0	0.6	1.6	-0.2	-1.1	-0.9	-2.9	0.4	1.9	-0.1			
				Wind -Y ecc.+	1.7	-0.9	-2.6	-1.0	-2.1	0.0	1.6	2.1	3.8	-0.6	-2.6	-0.0			
				Wind -Y ecc.-	1.2	-0.8	-2.0	-0.6	-1.6	0.2	1.1	0.9	2.9	-0.4	-1.9	0.1			
				Earthquake X Mode 1	-11.7	-6.1	5.4	8.1	4.3	0.5	-11.2	-29.1	-7.8	2.9	5.2	0.7			
				Earthquake X Mode 2	30.0	25.3	4.9	-20.5	3.9	0.7	28.5	83.4	-7.3	-5.3	5.0	0.6			
				Earthquake X Mode 3	-2.4	0.1	2.3	1.3	1.8	-0.2	-2.3	-3.7	-3.3	0.6	2.2	-0.2			
				Earthquake X Mode 4	3.6	-5.0	-0.8	-4.2	-0.6	-0.1	3.4	7.2	1.1	-2.7	-0.8	-0.2			
				Earthquake X Mode 5	-12.6	19.8	-0.9	15.7	-0.7	-0.2	-11.9	-25.4	1.3	10.3	-0.9	-0.1			
				Earthquake X Mode 6	0.5	-0.5	-0.5	-0.4	-0.4	0.0	0.4	0.6	0.7	-0.2	-0.5	0.0			
				Earthquake X Mode 7	-0.9	3.5	0.1	1.8	0.0	0.0	-0.8	-1.7	-0.1	1.3	0.1	0.1			
				Earthquake X Mode 8	-0.9	3.0	0.5	1.5	0.4	-0.0	-0.9	-1.4	-0.6	1.1	0.4	-0.0			
				Earthquake X Mode 9	-4.0	16.4	-0.5	8.2	-0.4	-0.0	-3.8	-7.3	0.6	6.2	-0.4	-0.0			
				Earthquake Y Mode 1	-5.3	-2.8	2.5	3.7	1.9	0.2	-5.1	-13.2	-3.5	1.3	2.4	0.3			
				Earthquake Y Mode 2	9.3	7.8	1.5	-6.3	1.2	0.2	8.8	25.8	-2.3	-1.6	1.5	0.2			
				Earthquake Y Mode 3	-14.5	0.5	13.8	8.1	11.0	-1.2	-13.9	-22.8	-20.0	3.8	13.3	-1.1			
				Earthquake Y Mode 4	0.7	-1.0	-0.2	-0.8	-0.1	-0.0	0.7	1.4	0.2	-0.5	-0.2	-0.0			
				Earthquake Y Mode 5	-2.3	3.6	-0.2	2.9	-0.1	-0.0	-2.2	-4.6	0.2	1.9	-0.2	-0.0			
				Earthquake Y Mode 6	3.7	-3.7	-4.0	-2.9	-3.1	0.2	3.5	4.7	5.5	-1.9	-3.7	0.2			
				Earthquake Y Mode 7	-0.3	1.0	0.0	0.5	0.0	0.0	-0.3	-0.5	-0.0	0.4	0.0	0.0			
				Earthquake Y Mode 8	-2.3	7.5	1.2	3.8	0.9	-0.0	-2.2	-3.4	-1.5	2.9	1.1	-0.0			
				Earthquake Y Mode 9	-1.5	6.0	-0.2	3.0	-0.1	-0.0	-1.4	-2.7	0.2	2.3	-0.2	-0.0			
				Floor 4	30.0	9.00/12.00	Self weight	182.7	41.8	3.6	34.2	3.0	-0.4	152.8	-57.8	-5.8	12.6	3.8	-0.4
							Dead load	107.1	-2.1	1.1	-6.2	0.7	-0.1	106.2	15.1	-1.2	-6.8	0.8	-0.1
							Live load	49.3	22.0	1.3	19.0	1.0	-0.2	48.4	-33.2	-1.7	7.5	1.2	-0.2
							Wind +X ecc.+	-6.6	-0.6	0.1	4.4	0.1	-0.0	-6.6	-13.3	-0.2	2.1	0.1	-0.0
							Wind +X ecc.-	-6.8	-0.5	0.3	4.5	0.3	-0.0	-6.8	-13.7	-0.4	2.2	0.3	0.0
							Wind -X ecc.+	6.6	0.6	-0.1	-4.4	-0.1	0.0	6.6	13.3	0.2	-2.1	-0.1	0.0
							Wind -X ecc.-	6.8	0.5	-0.3	-4.5	-0.3	0.0	6.8	13.7	0.4	-2.2	-0.3	-0.0
Wind +Y ecc.+	-3.1	1.1	3.9				1.2	3.0	-0.1	-3.0	-2.4	-5.4	0.7	3.6	-0.1				
Wind +Y ecc.-	-2.0	0.8	2.9				0.5	2.3	-0.3	-2.0	-0.6	-4.1	0.3	2.7	-0.3				
Wind -Y ecc.+	3.1	-1.1	-3.9				-1.2	-3.0	0.1	3.0	2.4	5.4	-0.7	-3.6	0.1				
Wind -Y ecc.-	2.0	-0.8	-2.9				-0.5	-2.3	0.3	2.0	0.6	4.1	-0.3	-2.7	0.3				
Earthquake X Mode 1	-31.3	6.7	7.5				20.5	5.8	0.6	-31.1	-52.8	-10.3	10.8	6.8	0.8				
Earthquake X Mode 2	90.3	-18.0	7.4				-61.0	5.8	0.7	89.6	159.1	-10.4	-31.9	7.1	0.5				
Earthquake X Mode 3	-5.2	1.5	3.1				2.5	2.4	-0.3	-5.2	-5.8	-4.3	1.4	2.8	-0.3				
Earthquake X Mode 4	7.5	-10.6	-0.7				-4.7	-0.5	-0.1	7.3	3.3	0.9	-3.3	-0.6	-0.1				
Earthquake X Mode 5	-27.0	40.0	-0.8				16.5	-0.6	-0.1	-26.1	-8.5	0.9	11.5	-0.7	-0.1				
Earthquake X Mode 6	0.8	-0.8	-0.5				-0.3	-0.3	0.0	0.8	0.2	0.5	-0.2	-0.4	0.0				
Earthquake X Mode 7	-1.2	1.9	-0.0				-0.3	-0.0	-0.0	-1.1	2.7	0.0	-0.2	-0.0	-0.0				
Earthquake X Mode 8	-1.2	1.5	-0.0				-0.3	-0.0	-0.0	-1.1	2.4	0.1	-0.2	-0.1	-0.0				
Earthquake X Mode 9	-5.2	8.3	0.0				-1.9	0.1	0.0	-4.8	13.4	-0.2	-1.3	0.1	0.0				
Earthquake Y Mode 1	-14.2	3.1	3.4				9.3	2.6	0.3	-14.1	-24.0	-4.7	4.9	3.1	0.4				
Earthquake Y Mode 2	27.9	-5.6	2.3				-18.8	1.8	0.2	27.7	49.2	-3.2	-9.8	2.2	0.1				
Earthquake Y Mode 3	-32.2	9.3	19.4				15.5	15.0	-1.8	-31.8	-35.8	-26.6	8.3	17.4	-1.9				
Earthquake Y Mode 4	1.4	-2.0	-0.1				-0.9	-0.1	-0.0	1.4	0.6	0.2	-0.6	-0.1	-0.0				
Earthquake Y Mode 5	-4.9	7.3	-0.2				3.0	-0.1	-0.0	-4.7	-1.5	0.2	2.1	-0.1	-0.0				
Earthquake Y Mode 6	6.7	-6.4	-3.8				-2.9	-2.7	0.2	6.5	2.0	4.5	-1.9	-3.1	0.3				
Earthquake Y Mode 7	-0.4	0.6	-0.0				-0.1	-0.0	-0.0	-0.3	0.8	0.0	-0.1	-0.0	-0.0				
Earthquake Y Mode 8	-3.0	3.6	-0.0				-0.8	-0.1	-0.0	-2.8	5.9	0.3	-0.6	-0.2	-0.0				
Earthquake Y Mode 9	-1.9	3.0	0.0				-0.7	0.0	0.0	-1.8	4.9	-0.1	-0.5	0.0	0.0				
Floor 3	30.0	6.00/9.00	Self weight				288.7	40.0	2.6	33.5	2.1	-0.3	258.0	-56.5	-3.8	12.6	2.5	-0.4	
			Dead load				122.3	1.5	1.1	2.2	0.8	-0.1	120.7	-4.3	-1.5	0.3	1.0	-0.1	
			Live load				87.1	20.5	1.0	17.2	0.9	-0.1	86.0	-29.3	-1.6	6.1	1.0	-0.2	
			Wind +X ecc.+				-14.3	5.0	0.1	7.4	0.1	-0.0	-14.1	-16.5	-0.2	4.1	0.1	-0.0	
			Wind +X ecc.-				-14.7	5.2	0.4	7.6	0.3	0.0	-14.5	-17.0	-0.5	4.2	0.3	0.0	
			Wind -X ecc.+				14.3	-5.0	-0.1	-7.4	-0.1	0.0	14.1	16.5	0.2	-4.1	-0.1	0.0	
			Wind -X ecc.-				14.7	-5.2	-0.4	-7.6	-0.3	-0.0	14.5	17.0	0.5	-4.2	-0.3	-0.0	
			Wind +Y ecc.+	-4.6	1.4	5.2	1.4	4.0	-0.1	-4.6	-2.6	-7.1	0.8	4.7	-0.1				
			Wind +Y ecc.-	-2.8	0.7	3.9	0.4	3.0	-0.4	-2.7	-0.4	-5.4	0.2	3.5	-0.4				
			Wind -Y ecc.+	4.6	-1.4	-5.2	-1.4	-4.0	0.1	4.6	2.6	7.1	-0.8	-4.7	0.1				
			Wind -Y ecc.-	2.8	-0.7	-3.9	-0.4	-3.0	0.4	2.7	0.4	5.4	-0.2	-3.5	0.4				
			Earthquake X Mode 1	-60.9	28.0	9.2	29.4	7.0	0.7	-60.1	-57.9	-12.2	16.8	8.1	1.0				
			Earthquake X Mode 2	183.4	-87.7	9.7	-88.9	7.3	0.8	180.6	172.2	-13.0	-50.9	9.0	0.5				
			Earthquake X Mode 3	-9.0	3.5	3.9	3.3	3.0	-0.4	-8.9	-6.0	-5.3	1.9	3.5	-0.4				
			Earthquake X Mode 4	9.3	-8.9	-0.2	-0.9	-0.1	-0.0	9.0	-6.2	0.1	-0.7	-0.1	-0.0				
			Earthquake X Mode 5	-32.9	32.9	-0.2	1.9	-0.0	-0.0	-31.6	26.4	-0.0	1.8	-0.0	0.0				
			Earthquake X Mode 6	1.0	-0.6	-0.1	-0.0	-0.1	0.0	0.9	-0.4	0.1	-0.0	-0.1	0.0				
			Earthquake X Mode 7	-0.4	-2.8	-0.1	-2.1	-0.0	-0.0	-0.4	3.2	0.1	-1.6	-0.1	-0.0				
			Earthquake X Mode 8	-0.5	-2.4	-0.5	-1.7	-0.3	0.0	-0.5	2.6	0.6	-1.3	-0.4	0.0				
			Earthquake X Mode 9	-1.4	-13.5	0.5	-9.6	0.4	0.0	-1.3	14.2	-0.6	-7.2	0.4	0.0				
			Earthquake Y Mode 1	-27.7	12.7	4.2	13.3	3.2	0.3	-27.3	-26.3	-5.5	7.6	3.7	0.4				
			Earthquake Y Mode 2	56.7	-27.1	3.0	-27.5	2.3	0.2	55.8	53.2	-4.0	-15.7	2.8	0.1				
			Earthquake Y Mode 3	-55.6	21.8	24.3	20.1	18.6	-2.2	-54.8	-37.1	-32.5	11.5	21.4	-2.3				
			Earthquake Y Mode 4	1.8	-1.7	-0.0	-0.2	-0.0	-0.0	1.7	-1.2	0.0	-0.1	-0.0	-0.0				
			Earthquake Y Mode 5	-6.0	6.0	-0.0	0.3	-0.0	-0.0	-5.7	4.8	-0.0	0.3	-0.0	0.0				
			Earthquake Y Mode 6	8.0	-4.7	-1.2	-0.4	-0.7	0.1	7.7	-3.5	0.9	-0.2	-0.6	0.1				
			Earthquake Y Mode 7	-0.1	-0.8	-0.0	-0.6	-0.0	-0.0	-0.1	1.0	0.0	-0.5	-0.0	-0.0				
			Earthquake Y Mode 8	-1.2	-6.1	-1.1	-4.3	-0.9	0.0	-1.1	6.4	1.5	-3.3	-1.0	0.0				
			Earthquake Y Mode 9	-0.5	-4.9	0.2	-3.5	0.1	0.0	-0.5	5.2	-0.2	-2.6	0.2	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	30.0	3.00/6.00	Self weight	392.7	38.6	0.9	31.4	1.1	-0.2	361.2	-51.4	-2.5	11.6	1.4	-0.3
				Dead load	137.0	0.5	0.7	0.4	0.5	-0.0	135.4	-0.1	-1.0	-1.0	0.7	-0.1
				Live load	123.6	20.0	0.1	16.5	0.3	-0.1	122.1	-27.5	-0.8	5.9	0.4	-0.1
				Wind +X ecc.+	-24.8	16.6	0.1	11.0	0.1	-0.0	-24.3	-15.4	-0.1	7.0	0.1	-0.0
				Wind +X ecc.-	-25.4	17.0	0.4	11.2	0.3	0.0	-25.0	-15.9	-0.5	7.1	0.3	0.1
				Wind -X ecc.+	24.8	-16.6	-0.1	-11.0	-0.1	0.0	24.3	15.4	0.1	-7.0	-0.1	0.0
				Wind -X ecc.-	25.4	-17.0	-0.4	-11.2	-0.3	-0.0	25.0	15.9	0.5	-7.1	-0.3	-0.1
				Wind +Y ecc.+	-6.4	2.0	6.2	1.5	4.6	-0.2	-6.4	-2.3	-8.0	0.9	5.4	-0.2
				Wind +Y ecc.-	-3.5	0.3	4.8	0.2	3.6	-0.4	-3.5	-0.3	-6.2	0.1	4.1	-0.5
				Wind -Y ecc.+	6.4	-2.0	-6.2	-1.5	-4.6	0.2	6.4	2.3	8.0	-0.9	-5.4	0.2
				Wind -Y ecc.-	3.5	-0.3	-4.8	-0.2	-3.6	0.4	3.5	0.3	6.2	-0.1	-4.1	0.5
				Earthquake X Mode 1	-97.2	61.9	9.5	37.0	7.0	0.8	-95.4	-46.6	-11.9	23.4	8.0	1.0
				Earthquake X Mode 2	297.3	-201.2	10.7	-114.7	7.8	0.8	291.5	135.3	-13.3	-73.2	9.4	0.4
				Earthquake X Mode 3	-13.4	6.7	4.3	3.9	3.2	-0.4	-13.2	-4.7	-5.4	2.4	3.6	-0.4
				Earthquake X Mode 4	7.6	0.7	0.5	4.2	0.4	0.1	7.3	-11.2	-0.7	2.9	0.5	0.1
				Earthquake X Mode 5	-25.5	-3.8	0.6	-16.5	0.5	0.1	-24.6	43.2	-1.0	-11.3	0.7	0.1
				Earthquake X Mode 6	0.8	0.1	0.3	0.3	0.2	-0.0	0.8	-0.7	-0.4	0.2	0.3	-0.0
				Earthquake X Mode 7	0.1	-2.2	0.0	-0.2	0.0	-0.0	0.0	-1.7	-0.0	-0.1	0.0	-0.0
				Earthquake X Mode 8	0.0	-1.8	-0.1	-0.1	-0.0	0.0	-0.1	-1.5	0.0	-0.0	0.0	0.0
				Earthquake X Mode 9	1.0	-10.2	0.1	-0.4	0.0	0.0	0.7	-8.6	-0.0	-0.4	0.0	-0.0
				Earthquake Y Mode 1	-44.1	28.1	4.3	16.8	3.2	0.3	-43.3	-21.1	-5.4	10.6	3.6	0.4
				Earthquake Y Mode 2	91.8	-62.1	3.3	-35.4	2.4	0.2	90.1	41.8	-4.1	-22.6	2.9	0.1
				Earthquake Y Mode 3	-82.6	41.2	26.5	23.8	19.6	-2.4	-81.2	-28.8	-33.5	14.9	22.4	-2.5
				Earthquake Y Mode 4	1.5	0.1	0.1	0.8	0.1	0.0	1.4	-2.2	-0.1	0.6	0.1	0.0
				Earthquake Y Mode 5	-4.6	-0.7	0.1	-3.0	0.1	0.0	-4.5	7.9	-0.2	-2.1	0.1	0.0
				Earthquake Y Mode 6	6.9	1.0	2.1	2.5	1.7	-0.1	6.7	-6.1	-3.3	1.8	2.2	-0.1
				Earthquake Y Mode 7	0.0	-0.7	0.0	-0.0	0.0	-0.0	0.0	-0.5	-0.0	-0.0	0.0	-0.0
				Earthquake Y Mode 8	0.0	-4.4	-0.2	-0.1	-0.1	0.0	-0.1	-3.8	0.1	-0.1	-0.1	0.0
				Earthquake Y Mode 9	0.4	-3.7	0.0	-0.2	0.0	0.0	0.3	-3.2	-0.0	-0.1	0.0	-0.0
	Floor 1	30.0	0.00/3.00	Self weight	488.6	24.2	0.2	22.8	0.1	-0.0	456.5	-40.2	-0.1	5.8	0.1	-0.1
				Dead load	149.8	1.3	0.3	0.6	0.2	-0.0	148.1	0.1	-0.4	-0.7	0.3	-0.0
				Live load	155.4	12.5	-0.0	12.0	-0.1	0.0	153.7	-21.9	0.3	2.8	-0.1	-0.0
				Wind +X ecc.+	-35.4	46.0	0.0	16.7	0.0	-0.0	-34.5	-2.9	-0.1	12.9	0.0	0.0
				Wind +X ecc.-	-36.2	46.9	0.2	17.1	0.2	0.0	-35.3	-3.1	-0.3	13.2	0.2	0.0
				Wind -X ecc.+	35.4	-46.0	-0.0	-16.7	-0.0	0.0	34.5	2.9	0.1	-12.9	-0.0	-0.0
				Wind -X ecc.-	36.2	-46.9	-0.2	-17.1	-0.2	-0.0	35.3	3.1	0.3	-13.2	-0.2	-0.0
				Wind +Y ecc.+	-7.9	2.5	5.0	1.2	3.4	-0.1	-7.7	-1.0	-5.3	0.8	3.8	-0.2
				Wind +Y ecc.-	-3.9	-1.7	4.1	-0.6	2.7	-0.3	-3.9	-0.1	-4.3	-0.5	3.1	-0.4
				Wind -Y ecc.+	7.9	-2.5	-5.0	-1.2	-3.4	0.1	7.7	1.0	5.3	-0.8	-3.8	0.2
				Wind -Y ecc.-	3.9	1.7	-4.1	0.6	-2.7	0.3	3.9	0.1	4.3	0.5	-3.1	0.4
				Earthquake X Mode 1	-130.1	135.9	6.2	47.1	4.1	0.5	-127.0	-2.6	-6.2	35.9	4.5	0.6
				Earthquake X Mode 2	402.0	-448.1	7.9	-150.4	5.1	0.5	391.8	-5.6	-7.7	-116.0	6.0	0.1
				Earthquake X Mode 3	-17.1	12.9	3.2	4.4	2.2	-0.3	-16.8	-0.1	-3.4	3.3	2.4	-0.3
				Earthquake X Mode 4	3.9	16.5	0.5	7.6	0.4	0.1	3.9	-5.5	-0.6	5.9	0.4	0.1
				Earthquake X Mode 5	-11.0	-63.5	0.8	-28.7	0.5	0.1	-11.4	19.9	-0.9	-22.3	0.7	0.1
Earthquake X Mode 6				0.6	1.1	0.4	0.5	0.3	-0.0	0.6	-0.3	-0.4	0.4	0.3	-0.0	
Earthquake X Mode 7				-0.4	4.0	0.0	2.4	0.0	0.0	-0.4	-3.0	-0.1	1.9	0.0	0.0	
Earthquake X Mode 8				-0.4	3.3	0.4	2.0	0.3	-0.0	-0.5	-2.4	-0.4	1.6	0.3	-0.0	
Earthquake X Mode 9				-1.6	18.9	-0.4	11.3	-0.3	-0.0	-1.7	-13.8	0.5	9.0	-0.3	-0.0	
Earthquake Y Mode 1				-59.0	61.7	2.8	21.4	1.9	0.2	-57.6	-1.2	-2.8	16.3	2.0	0.3	
Earthquake Y Mode 2				124.2	-138.4	2.5	-46.5	1.6	0.1	121.0	-1.7	-2.4	-35.8	1.8	0.0	
Earthquake Y Mode 3				-105.5	79.1	19.9	26.9	13.4	-1.6	-103.3	-0.4	-21.0	20.2	14.8	-1.9	
Earthquake Y Mode 4				0.7	3.2	0.1	1.5	0.1	0.0	0.8	-1.1	-0.1	1.1	0.1	0.0	
Earthquake Y Mode 5				-2.0	-11.5	0.1	-5.2	0.1	0.0	-2.1	3.6	-0.2	-4.0	0.1	0.0	
Earthquake Y Mode 6				4.6	8.8	3.1	4.0	2.1	-0.2	4.6	-2.7	-3.5	3.0	2.5	-0.2	
Earthquake Y Mode 7	-0.1	1.2	0.0	0.7	0.0	0.0	-0.1	-0.9	-0.0	0.6	0.0	0.0				
Earthquake Y Mode 8	-1.1	8.3	0.9	5.0	0.6	-0.0	-1.1	-6.1	-1.1	4.0	0.8	-0.0				
Earthquake Y Mode 9	-0.6	6.9	-0.1	4.1	-0.1	-0.0	-0.6	-5.0	0.2	3.3	-0.1	-0.0				
W57	techo	30.0	12.00/15.00	Self weight	109.8	51.8	-4.3	52.1	-3.0	0.2	76.2	-96.6	4.8	27.9	-3.4	0.1
				Dead load	67.0	22.2	-2.6	32.9	-1.9	0.1	62.1	-71.1	3.3	14.3	-2.4	0.2
				Live load	16.1	20.3	-2.4	16.8	-1.8	0.1	15.0	-27.8	3.1	9.7	-2.1	0.0
				Wind +X ecc.+	-2.1	-3.2	-0.2	1.1	-0.1	0.0	-2.0	-6.2	0.2	-0.0	-0.1	0.0
				Wind +X ecc.-	-1.9	-3.3	-0.0	0.9	-0.0	0.1	-1.8	-5.7	0.0	-0.1	0.0	0.0
				Wind -X ecc.+	2.1	3.2	0.2	-1.1	0.1	-0.0	2.0	6.2	-0.2	0.0	0.1	-0.0
				Wind -X ecc.-	1.9	3.3	0.0	-0.9	0.0	-0.1	1.8	5.7	-0.0	0.1	-0.0	-0.0
				Wind +Y ecc.+	2.3	-1.6	2.7	-1.8	2.2	-0.0	2.2	3.6	-4.0	-1.1	2.6	0.0
				Wind +Y ecc.-	1.4	-1.3	2.0	-0.9	1.6	-0.1	1.3	1.2	-3.0	-0.6	1.9	-0.1
				Wind -Y ecc.+	-2.3	1.6	-2.7	1.8	-2.2	0.0	-2.2	-3.6	4.0	1.1	-2.6	-0.0
				Wind -Y ecc.-	-1.4	1.3	-2.0	0.9	-1.6	0.1	-1.3	-1.2	3.0	0.6	-1.9	0.1
				Earthquake X Mode 1	-1.9	-11.4	4.6	-0.8	3.7	0.7	-1.8	-9.0	-6.9	-2.2	4.6	0.8
				Earthquake X Mode 2	40.6	21.3	8.8	-29.3	7.0	-0.1	38.7	104.7	-12.6	-10.4	8.2	0.4
				Earthquake X Mode 3	0.2	-1.7	2.1	0.1	1.7	-0.2	0.2	-2.0	-3.2	-0.2	2.1	-0.1
				Earthquake X Mode 4	1.8	-2.7	-0.8	-2.2	-0.6	-0.2	1.7	3.6	1.0	-1.4	-0.7	-0.2
				Earthquake X Mode 5	-14.4	22.4	-1.4	17.9	-1.1	-0.0	-13.6	-29.0	1.9	11.7	-1.3	-0.1
				Earthquake X Mode 6	0.0	-0.3	-0.5	-0.2	-0.4	0.0	0.0	0.4	0.7	-0.1	-0.4	0.0
				Earthquake X Mode 7	-0.5	2.0	0.1	1.0	0.0	0.0	-0.5	-0.8	-0.1	0.7	0.1	0.1
				Earthquake X Mode 8	-0.6	2.9	0.5	1.5	0.4	-0.0	-0.5	-1.3	-0.6	1.1	0.4	-0.0
				Earthquake X Mode 9	-4.6	18.3	-0.6	9.1	-0.4	-0.0	-4.3	-8.1	0.7	7.0	-0.5	-0.0
				Earthquake Y Mode 1	-0.9	-5.2	2.1	-0.4	1.7	0.3	-0.8	-4.1	-3.1	-1.0	2.1	0.4
				Earthquake Y Mode 2	12.6	6.6	2.7	-9.1	2.2	-0.0	12.0	32.3	-3.9	-3.2	2.5	0.1
Earthquake Y Mode 3	1.4	-10.8	13.2	0.7	10.6	-1.0	1.3	-12.5	-19.5	-1.4	12.8	-0.9				
Earthquake Y Mode 4	0.3	-0.5	-0.1	-0.4	-0.1	-0.0	0.3	0.7	0.2	-0.3	-0.1	-0.0				
Earthquake Y Mode 5	-2.6	4.1	-0.3	3.3	-0.2	-0.0	-2.5	-5.3	0.4	2.1	-0.2	-0.0				
Earthquake Y Mode 6	0.3	-2.4	-4.0	-1.9	-3.1	0.2	0.2	3.0	5.5	-1.2	-3.7	0.1				
Earthquake Y Mode 7	-0.2	0.6	0.0	0.3	0.0	0.0	-0.1	-0.2	-0.0	0.2	0.0	0.0				
Earthquake Y Mode 8	-1.5	7.3	1.2	3.6	0.9	-0.0	-1.4	-3.2	-1.5	2.8	1.1	-0.0				
Earthquake Y Mode 9	-1.7	6.7	-0.2	3.3	-0.1	-0.0	-1.6	-3.0	0.3	2.5	-0.2	-0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 4	30.0	9.00/12.00	Self weight	213.3	42.2	-4.8	33.4	-3.8	0.3	183.6	-55.6	6.8	11.3	-4.4	0.2
				Dead load	102.8	2.2	-2.9	-1.4	-2.2	0.3	101.6	5.6	4.0	-3.6	-2.7	0.2
				Live load	56.7	23.1	-2.2	19.8	-1.7	0.1	55.9	-34.7	2.9	7.7	-1.9	0.1
				Wind +X ecc.+	-6.6	-0.8	-0.2	4.4	-0.1	0.0	-6.6	-13.7	0.2	2.2	-0.1	0.0
				Wind +X ecc.-	-6.2	-0.9	0.0	4.2	0.0	0.1	-6.1	-13.0	-0.1	2.0	0.1	0.1
				Wind -X ecc.+	6.6	0.8	0.2	-4.4	0.1	-0.0	6.6	13.7	-0.2	-2.2	0.1	-0.0
				Wind -X ecc.-	6.2	0.9	-0.0	-4.2	-0.0	-0.1	6.1	13.0	0.1	-2.0	-0.1	-0.1
				Wind +Y ecc.+	4.4	-1.7	3.9	-1.7	3.0	-0.1	4.4	3.3	-5.4	-0.9	3.5	-0.0
				Wind +Y ecc.-	2.3	-1.1	2.9	-0.4	2.3	-0.2	2.2	0.3	-4.0	-0.3	2.6	-0.2
				Wind -Y ecc.+	-4.4	1.7	-3.9	1.7	-3.0	0.1	-4.4	-3.3	5.4	0.9	-3.5	0.0
				Wind -Y ecc.-	-2.3	1.1	-2.9	0.4	-2.3	0.2	-2.2	-0.3	4.0	0.3	-2.6	0.2
				Earthquake X Mode 1	-10.8	-1.8	6.6	9.3	5.1	0.8	-10.8	-28.9	-9.1	4.8	6.0	1.0
				Earthquake X Mode 2	112.2	-25.0	11.3	-71.4	8.7	-0.1	110.7	183.1	-15.2	-37.8	9.8	0.3
				Earthquake X Mode 3	-1.0	-0.1	3.0	1.7	2.3	-0.2	-1.0	-5.1	-4.1	0.9	2.7	-0.3
				Earthquake X Mode 4	4.1	-6.7	-0.7	-2.8	-0.5	-0.1	3.9	1.4	0.7	-2.0	-0.5	-0.1
				Earthquake X Mode 5	-30.3	44.6	-1.2	18.4	-0.9	-0.0	-29.3	-9.6	1.4	12.8	-0.9	-0.1
				Earthquake X Mode 6	0.2	-0.7	-0.5	-0.3	-0.3	0.0	0.2	0.1	0.5	-0.2	-0.4	0.0
				Earthquake X Mode 7	-0.7	1.1	-0.0	-0.2	-0.0	-0.0	-0.6	1.6	0.1	-0.1	-0.0	-0.0
				Earthquake X Mode 8	-0.8	1.6	-0.0	-0.3	-0.0	-0.0	-0.7	2.4	0.1	-0.2	-0.1	-0.0
				Earthquake X Mode 9	-6.0	9.1	0.0	-2.1	0.1	0.0	-5.5	14.8	-0.2	-1.4	0.1	0.0
				Earthquake Y Mode 1	-4.9	-0.8	3.0	4.2	2.3	0.4	-4.9	-13.1	-4.1	2.2	2.7	0.4
				Earthquake Y Mode 2	34.7	-7.7	3.5	-22.1	2.7	-0.0	34.2	56.6	-4.7	-11.7	3.0	0.1
				Earthquake Y Mode 3	-6.4	-0.5	18.5	10.6	14.4	-1.5	-6.4	-31.2	-25.4	5.6	16.5	-1.6
				Earthquake Y Mode 4	0.8	-1.3	-0.1	-0.5	-0.1	-0.0	0.8	0.3	0.1	-0.4	-0.1	-0.0
				Earthquake Y Mode 5	-5.5	8.1	-0.2	3.4	-0.2	-0.0	-5.3	-1.7	0.3	2.3	-0.2	-0.0
				Earthquake Y Mode 6	1.7	-6.0	-3.7	-2.3	-2.7	0.2	1.6	0.6	4.4	-1.7	-3.0	0.2
				Earthquake Y Mode 7	-0.2	0.3	-0.0	-0.0	-0.0	-0.0	-0.2	0.5	0.0	-0.0	-0.0	-0.0
				Earthquake Y Mode 8	-1.9	3.9	-0.0	-0.8	-0.1	-0.0	-1.8	6.1	0.3	-0.5	-0.2	-0.0
				Earthquake Y Mode 9	-2.2	3.3	0.0	-0.8	0.0	0.0	-2.0	5.4	-0.1	-0.5	0.0	0.0
	Floor 3	30.0	6.00/9.00	Self weight	319.4	41.0	-3.6	34.4	-2.8	0.2	288.6	-58.6	4.9	12.8	-3.2	0.2
				Dead load	136.8	4.4	-2.6	4.4	-2.0	0.2	135.0	-8.0	3.7	1.7	-2.5	0.2
				Live load	97.3	21.5	-1.8	17.9	-1.4	0.1	96.3	-30.7	2.5	6.3	-1.6	0.1
				Wind +X ecc.+	-14.4	4.9	-0.2	7.5	-0.1	0.0	-14.2	-16.9	0.2	4.2	-0.1	0.0
				Wind +X ecc.-	-13.6	4.6	0.1	7.1	0.1	0.1	-13.4	-16.1	-0.2	4.0	0.1	0.1
				Wind -X ecc.+	14.4	-4.9	0.2	-7.5	0.1	-0.0	14.2	16.9	-0.2	-4.2	0.1	-0.0
				Wind -X ecc.-	13.6	-4.6	-0.1	-7.1	-0.1	-0.1	13.4	16.1	0.2	-4.0	-0.1	-0.1
				Wind +Y ecc.+	6.7	-2.2	5.2	-2.0	4.0	-0.1	6.6	3.6	-7.1	-1.1	4.6	-0.1
				Wind +Y ecc.-	2.9	-0.9	3.9	-0.3	3.0	-0.3	2.8	-0.0	-5.3	-0.2	3.5	-0.3
				Wind -Y ecc.+	-6.7	2.2	-5.2	2.0	-4.0	0.1	-6.6	-3.6	7.1	1.1	-4.6	0.1
				Wind -Y ecc.-	-2.9	0.9	-3.9	0.3	-3.0	0.3	-2.8	0.0	5.3	0.2	-3.5	0.3
				Earthquake X Mode 1	-27.5	14.0	8.3	15.8	6.3	1.0	-27.0	-32.2	-11.0	9.2	7.4	1.2
				Earthquake X Mode 2	217.9	-100.7	13.3	-101.4	10.1	-0.1	214.0	196.3	-17.6	-58.5	11.4	0.3
				Earthquake X Mode 3	-3.6	2.5	3.8	2.7	2.9	-0.3	-3.5	-5.5	-5.1	1.6	3.3	-0.3
				Earthquake X Mode 4	5.1	-5.8	-0.1	-0.3	-0.1	-0.0	4.9	-4.7	0.0	-0.3	-0.0	-0.0
				Earthquake X Mode 5	-37.0	36.7	-0.4	2.3	-0.2	0.0	-35.5	28.9	0.3	2.1	-0.2	-0.0
Earthquake X Mode 6				0.3	-0.6	-0.1	-0.0	-0.1	0.0	0.2	-0.6	0.1	-0.0	-0.1	0.0	
Earthquake X Mode 7				-0.2	-1.6	-0.1	-1.2	-0.0	-0.0	-0.2	1.8	0.1	-0.9	-0.1	-0.0	
Earthquake X Mode 8				-0.1	-2.4	-0.5	-1.7	-0.3	0.0	-0.1	2.6	0.6	-1.3	-0.4	0.0	
Earthquake X Mode 9				-1.9	-14.9	0.5	-10.6	0.4	0.0	-1.7	15.6	-0.6	-8.0	0.4	0.0	
Earthquake Y Mode 1				-12.5	6.3	3.8	7.2	2.9	0.5	-12.2	-14.6	-5.0	4.2	3.4	0.5	
Earthquake Y Mode 2				67.3	-31.1	4.1	-31.3	3.1	-0.0	66.1	60.6	-5.4	-18.1	3.5	0.1	
Earthquake Y Mode 3				-22.0	15.2	23.4	16.9	17.9	-1.9	-21.6	-34.1	-31.3	9.8	20.4	-2.0	
Earthquake Y Mode 4				1.0	-1.1	-0.0	-0.1	-0.0	-0.0	0.9	-0.9	0.0	-0.1	-0.0	-0.0	
Earthquake Y Mode 5				-6.7	6.7	-0.1	0.4	-0.0	0.0	-6.5	5.3	0.0	0.4	-0.0	-0.0	
Earthquake Y Mode 6				2.2	-5.3	-1.2	-0.1	-0.7	0.1	2.0	-4.9	0.8	-0.2	-0.6	0.1	
Earthquake Y Mode 7				-0.1	-0.5	-0.0	-0.4	-0.0	-0.0	-0.1	0.5	0.0	-0.3	-0.0	-0.0	
Earthquake Y Mode 8				-0.3	-6.0	-1.1	-4.3	-0.9	0.0	-0.2	6.4	1.5	-3.3	-1.0	0.0	
Earthquake Y Mode 9				-0.7	-5.4	0.2	-3.9	0.1	0.0	-0.6	5.7	-0.2	-2.9	0.2	0.0	
Floor 2	30.0	3.00/6.00	Self weight	426.3	40.8	-2.1	32.7	-1.7	0.1	394.7	-53.0	3.2	12.1	-2.0	0.1	
			Dead load	169.9	3.4	-2.3	2.7	-1.8	0.2	168.0	-4.0	3.3	0.5	-2.2	0.2	
			Live load	138.2	21.8	-1.0	17.6	-0.8	0.0	136.9	-29.1	1.6	6.4	-1.0	0.1	
			Wind +X ecc.+	-25.0	17.1	-0.1	11.2	-0.1	0.0	-24.5	-15.7	0.2	7.2	-0.1	0.0	
			Wind +X ecc.-	-23.7	16.4	0.2	10.7	0.1	0.1	-23.3	-14.9	-0.2	6.9	0.2	0.1	
			Wind -X ecc.+	25.0	-17.1	0.1	-11.2	0.1	-0.0	24.5	15.7	-0.2	-7.2	0.1	-0.0	
			Wind -X ecc.-	23.7	-16.4	-0.2	-10.7	-0.1	-0.1	23.3	14.9	0.2	-6.9	-0.2	-0.1	
			Wind +Y ecc.+	9.0	-3.1	6.2	-2.1	4.6	-0.1	8.9	3.0	-7.9	-1.2	5.3	-0.1	
			Wind +Y ecc.-	3.2	-0.0	4.7	0.2	3.6	-0.4	3.2	-0.5	-6.1	0.2	4.0	-0.4	
			Wind -Y ecc.+	-9.0	3.1	-6.2	2.1	-4.6	0.1	-8.9	-3.0	7.9	1.2	-5.3	0.1	
			Wind -Y ecc.-	-3.2	0.0	-4.7	-0.2	-3.6	0.4	-3.2	0.5	6.1	-0.2	-4.0	0.4	
			Earthquake X Mode 1	-49.2	39.8	8.8	22.0	6.4	1.1	-48.0	-24.9	-10.9	14.5	7.4	1.2	
			Earthquake X Mode 2	345.1	-225.0	13.5	-128.7	10.1	-0.1	338.0	153.2	-17.0	-82.4	11.1	0.3	
			Earthquake X Mode 3	-7.0	6.9	4.2	3.9	3.1	-0.3	-6.8	-4.5	-5.3	2.6	3.5	-0.4	
			Earthquake X Mode 4	3.8	0.5	0.5	2.8	0.4	0.1	3.7	-7.5	-0.7	1.9	0.5	0.1	
			Earthquake X Mode 5	-29.1	-4.0	0.7	-18.1	0.5	0.0	-28.2	47.6	-1.0	-12.5	0.6	0.1	
			Earthquake X Mode 6	0.1	0.0	0.3	0.3	0.2	-0.0	0.1	-0.9	-0.4	0.2	0.3	-0.0	
			Earthquake X Mode 7	0.1	-1.3	0.0	-0.1	0.0	-0.0	0.0	-1.0	-0.0	-0.1	0.0	-0.0	
			Earthquake X Mode 8	0.3	-1.9	-0.1	-0.1	-0.0	0.0	0.2	-1.5	0.0	-0.1	-0.0	0.0	
			Earthquake X Mode 9	0.8	-11.2	0.1	-0.4	0.0	-0.0	0.4	-9.6	-0.0	-0.4	0.0	-0.0	
			Earthquake Y Mode 1	-22.3	18.0	4.0	10.0	2.9	0.5	-21.8	-11.3	-4.9	6.6	3.4	0.5	
			Earthquake Y Mode 2	106.6	-69.5	4.2	-39.8	3.1	-0.0	104.4	47.3	-5.3	-25.5	3.4	0.1	
Earthquake Y Mode 3	-42.9	42.4	25.8	24.0	19.1	-2.1	-41.8	-27.8	-32.4	15.7	21.5	-2.2				
Earthquake Y Mode 4	0.7	0.1	0.1	0.5	0.1	0.0	0.7	-1.5	-0.1	0.4	0.1	0.0				
Earthquake Y Mode 5	-5.3	-0.7	0.1	-3.3	0.1	0.0	-5.1	8.7	-0.2	-2.3	0.1	0.0				
Earthquake Y Mode 6	0.9	0.3	2.1	2.7	1.7	-0.1	0.8	-7.3	-3.2	1.8	2.1	-0.1				
Earthquake Y Mode 7	0.0	-0.4	0.0	-0.0	0.0	-0.0	0.0	-0.3	-0.0	-0.0	0.0	-0.0				
Earthquake Y Mode 8	0.8	-4.7	-0.3	-0.2	-0.1	0.0	0.6	-3.9	0.1	-0.2	-0.1	0.0				
Earthquake Y Mode 9	0.3	-4.1	0.0	-0.2	0.0	-0.0	0.2	-3.5	-0.0	-0.1	0.0	-0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	30.0	0.00/3.00	Self weight	536.3	26.4	-0.3	24.5	-0.4	0.0	503.8	-43.1	1.1	6.5	-0.6	0.1
				Dead load	202.2	2.4	-0.7	2.0	-0.9	0.1	200.0	-2.6	2.0	0.2	-1.2	0.1
				Live load	180.4	14.1	-0.1	13.2	-0.2	-0.0	178.7	-24.0	0.5	3.3	-0.2	0.0
				Wind +X ecc.+	-35.7	47.6	-0.1	17.1	-0.1	0.0	-34.8	-2.6	0.1	13.3	-0.0	-0.0
				Wind +X ecc.-	-34.0	45.8	0.2	16.4	0.1	0.1	-33.1	-2.3	-0.1	12.7	0.1	0.0
				Wind -X ecc.+	35.7	-47.6	0.1	-17.1	0.1	-0.0	34.8	2.6	-0.1	-13.3	0.0	0.0
				Wind -X ecc.-	34.0	-45.8	-0.2	-16.4	-0.1	-0.1	33.1	2.3	0.1	-12.7	-0.1	-0.0
				Wind +Y ecc.+	10.7	-4.2	5.0	-1.6	3.4	-0.1	10.5	0.7	-5.2	-1.1	3.7	-0.1
				Wind +Y ecc.-	2.9	4.5	4.1	1.7	2.7	-0.3	2.9	-0.5	-4.3	1.5	3.0	-0.3
				Wind -Y ecc.+	-10.7	4.2	-5.0	1.6	-3.4	0.1	-10.5	-0.7	5.2	1.1	-3.7	0.1
				Wind -Y ecc.-	-2.9	-4.5	-4.1	-1.7	-2.7	0.3	-2.9	0.5	4.3	-1.5	-3.0	0.3
				Earthquake X Mode 1	-69.8	91.9	6.0	29.9	3.8	0.7	-67.8	4.2	-5.7	23.4	4.2	0.7
				Earthquake X Mode 2	460.2	-495.0	8.9	-166.2	6.1	-0.0	448.8	-6.3	-9.5	-127.9	6.3	0.2
				Earthquake X Mode 3	-10.5	18.1	3.2	6.1	2.1	-0.2	-10.2	0.2	-3.3	4.8	2.3	-0.3
				Earthquake X Mode 4	1.4	10.7	0.5	4.8	0.4	0.1	1.5	-3.3	-0.6	3.8	0.4	0.1
				Earthquake X Mode 5	-13.6	-70.1	0.8	-31.6	0.6	0.0	-14.0	21.6	-0.9	-24.6	0.6	0.1
				Earthquake X Mode 6	-0.2	1.3	0.4	0.6	0.3	-0.0	-0.2	-0.4	-0.4	0.5	0.3	-0.0
				Earthquake X Mode 7	-0.2	2.3	0.0	1.4	0.0	0.0	-0.2	-1.7	-0.1	1.1	0.0	0.0
				Earthquake X Mode 8	-0.2	3.4	0.4	2.0	0.3	-0.0	-0.2	-2.5	-0.4	1.6	0.3	-0.0
				Earthquake X Mode 9	-2.0	20.8	-0.4	12.5	-0.3	-0.0	-2.1	-15.1	0.5	9.9	-0.3	-0.0
				Earthquake Y Mode 1	-31.7	41.7	2.7	13.5	1.7	0.3	-30.8	1.9	-2.6	10.6	1.9	0.3
				Earthquake Y Mode 2	142.1	-152.9	2.7	-51.3	1.9	-0.0	138.6	-2.0	-2.9	-39.5	2.0	0.1
				Earthquake Y Mode 3	-64.7	111.5	19.8	37.6	13.2	-1.4	-62.7	1.3	-20.4	29.7	14.4	-1.6
				Earthquake Y Mode 4	0.3	2.1	0.1	0.9	0.1	0.0	0.3	-0.6	-0.1	0.7	0.1	0.0
				Earthquake Y Mode 5	-2.5	-12.8	0.2	-5.8	0.1	0.0	-2.6	3.9	-0.2	-4.5	0.1	0.0
				Earthquake Y Mode 6	-1.5	11.0	3.1	5.0	2.1	-0.1	-1.4	-3.5	-3.4	3.9	2.4	-0.1
				Earthquake Y Mode 7	-0.1	0.7	0.0	0.4	0.0	0.0	-0.1	-0.5	-0.0	0.3	0.0	0.0
				Earthquake Y Mode 8	-0.4	8.5	0.9	5.1	0.6	-0.0	-0.5	-6.2	-1.1	4.1	0.8	-0.0
				Earthquake Y Mode 9	-0.7	7.6	-0.1	4.6	-0.1	-0.0	-0.8	-5.5	0.2	3.6	-0.1	-0.0
W58	techo	30.0	12.00/15.00	Self weight	49.6	11.0	-1.4	10.7	-0.9	-0.1	27.5	-18.9	1.6	5.4	-1.2	-0.3
				Dead load	18.8	2.8	-0.1	2.3	-0.3	-0.0	17.7	-3.5	0.7	1.3	-0.3	-0.2
				Live load	5.7	4.5	-1.0	4.6	-0.8	-0.0	5.0	-8.4	1.4	2.3	-1.1	-0.0
				Wind +X ecc.+	0.6	2.0	0.1	2.9	0.1	-0.0	0.3	-6.3	-0.2	1.3	0.1	0.0
				Wind +X ecc.-	0.8	1.7	0.2	2.6	0.2	0.0	0.5	-5.7	-0.3	1.1	0.3	0.0
				Wind -X ecc.+	-0.6	-2.0	-0.1	-2.9	-0.1	0.0	-0.3	6.3	0.2	-1.3	-0.1	-0.0
				Wind -X ecc.-	-0.8	-1.7	-0.2	-2.6	-0.2	-0.0	-0.5	5.7	0.3	-1.1	-0.3	-0.0
				Wind +Y ecc.+	1.8	-2.8	1.6	-2.6	1.3	0.0	1.9	4.7	-2.7	-1.4	2.1	-0.1
				Wind +Y ecc.-	1.0	-1.4	1.1	-1.2	0.9	-0.1	1.1	2.0	-1.8	-0.6	1.4	-0.1
				Wind -Y ecc.+	-1.8	2.8	-1.6	2.6	-1.3	-0.0	-1.9	-4.7	2.7	1.4	-2.1	0.1
				Wind -Y ecc.-	-1.0	1.4	-1.1	1.2	-0.9	0.1	-1.1	-2.0	1.8	0.6	-1.4	0.1
				Earthquake X Mode 1	7.8	-0.6	4.1	2.0	3.4	0.3	7.0	-6.3	-6.8	0.3	5.4	0.2
				Earthquake X Mode 2	-6.5	-44.7	3.2	-54.0	2.6	0.2	-1.2	108.9	-5.1	-25.1	4.0	-0.0
				Earthquake X Mode 3	1.6	0.0	1.2	0.5	1.0	-0.1	1.5	-1.3	-2.0	0.1	1.6	-0.2
				Earthquake X Mode 4	-2.3	-2.4	-0.8	-2.0	-0.6	-0.1	-2.0	3.4	1.2	-1.0	-1.0	-0.1
				Earthquake X Mode 5	4.9	20.8	-0.7	18.0	-0.5	-0.1	3.3	-30.4	0.9	9.5	-0.8	-0.0
				Earthquake X Mode 6	-0.5	-0.2	-0.3	-0.1	-0.2	0.0	-0.5	0.2	0.5	-0.1	-0.4	0.0
				Earthquake X Mode 7	0.5	1.0	0.1	0.6	0.1	0.0	0.4	-0.8	-0.2	0.4	0.1	0.0
				Earthquake X Mode 8	0.8	1.5	0.3	0.9	0.3	-0.0	0.7	-1.2	-0.5	0.6	0.4	-0.0
				Earthquake X Mode 9	1.7	9.6	-0.4	6.4	-0.2	-0.0	1.2	-8.7	0.4	3.8	-0.4	0.0
				Earthquake Y Mode 1	3.5	-0.3	1.9	0.9	1.5	0.2	3.2	-2.9	-3.1	0.2	2.4	0.1
				Earthquake Y Mode 2	-2.0	-13.8	1.0	-16.7	0.8	0.1	-0.4	33.6	-1.6	-7.8	1.2	-0.0
				Earthquake Y Mode 3	10.0	0.1	7.5	2.8	6.2	-0.5	9.1	-7.8	-12.4	0.8	9.7	-1.0
				Earthquake Y Mode 4	-0.4	-0.5	-0.2	-0.4	-0.1	-0.0	-0.4	0.7	0.2	-0.2	-0.2	-0.0
				Earthquake Y Mode 5	0.9	3.8	-0.1	3.3	-0.1	-0.0	0.6	-5.5	0.2	1.7	-0.1	-0.0
				Earthquake Y Mode 6	-4.2	-1.5	-2.5	-1.2	-2.0	0.1	-3.9	1.9	3.8	-0.6	-3.1	0.3
				Earthquake Y Mode 7	0.1	0.3	0.0	0.2	0.0	0.0	0.1	-0.3	-0.0	0.1	0.0	0.0
				Earthquake Y Mode 8	2.1	3.6	0.9	2.3	0.6	-0.0	1.8	-3.0	-1.2	1.4	1.0	-0.1
				Earthquake Y Mode 9	0.6	3.5	-0.1	2.3	-0.1	-0.0	0.4	-3.2	0.2	1.4	-0.1	0.0
	Floor 4	30.0	9.00/12.00	Self weight	107.8	7.4	-1.7	5.9	-1.3	-0.1	86.3	-9.8	2.0	3.1	-1.0	-0.6
				Dead load	50.7	1.9	0.2	1.8	0.2	-0.1	48.8	-3.0	-0.8	1.0	1.2	-0.6
				Live load	24.0	3.5	-1.0	2.8	-0.7	-0.0	23.2	-4.8	1.1	1.5	-0.6	-0.3
				Wind +X ecc.+	1.3	4.5	0.1	5.1	0.1	-0.0	1.1	-11.0	-0.1	3.3	0.2	-0.0
				Wind +X ecc.-	1.7	4.1	0.3	4.8	0.2	0.0	1.5	-10.3	-0.4	3.0	0.4	-0.0
				Wind -X ecc.+	-1.3	-4.5	-0.1	-5.1	-0.1	0.0	-1.1	11.0	0.1	-3.3	-0.2	0.0
				Wind -X ecc.-	-1.7	-4.1	-0.3	-4.8	-0.2	-0.0	-1.5	10.3	0.4	-3.0	-0.4	0.0
				Wind +Y ecc.+	5.2	-2.7	2.4	-2.2	1.9	-0.0	5.0	4.2	-3.9	-1.4	3.3	-0.3
				Wind +Y ecc.-	3.2	-1.0	1.6	-0.7	1.3	-0.1	3.1	1.1	-2.6	-0.4	2.2	-0.4
				Wind -Y ecc.+	-5.2	2.7	-2.4	2.2	-1.9	0.0	-5.0	-4.2	3.9	1.4	-3.3	0.3
				Wind -Y ecc.-	-3.2	1.0	-1.6	0.7	-1.3	0.1	-3.1	-1.1	2.6	0.4	-2.2	0.4
				Earthquake X Mode 1	19.0	7.1	5.7	9.1	4.5	0.4	18.0	-19.8	-9.1	5.9	7.9	-0.4
				Earthquake X Mode 2	-8.6	-77.9	5.2	-78.4	4.2	0.3	-7.4	158.2	-7.8	-50.0	5.7	-0.1
				Earthquake X Mode 3	4.3	1.4	1.8	1.7	1.4	-0.1	4.2	-3.5	-2.8	1.1	2.4	-0.4
				Earthquake X Mode 4	-4.5	-3.4	-0.7	-1.9	-0.5	-0.1	-4.6	2.3	0.9	-1.3	-0.9	0.1
				Earthquake X Mode 5	8.6	24.3	-0.7	14.2	-0.5	-0.1	9.5	-18.7	0.7	9.5	-0.5	-0.0
				Earthquake X Mode 6	-1.1	-0.3	-0.3	-0.2	-0.2	0.0	-1.1	0.1	0.4	-0.1	-0.3	0.1
				Earthquake X Mode 7	0.6	0.3	-0.0	-0.1	-0.0	-0.0	0.7	0.6	0.1	-0.1	-0.0	-0.0
				Earthquake X Mode 8	1.1	0.4	-0.0	-0.2	-0.0	-0.0	1.2	0.9	0.1	-0.2	-0.0	-0.0
				Earthquake X Mode 9	1.8	2.1	0.0	-1.3	0.0	0.0	2.6	5.6	-0.2	-1.0	0.1	0.0
				Earthquake Y Mode 1	8.6	3.2	2.6	4.1	2.0	0.2	8.2	-9.0	-4.1	2.7	3.6	-0.2
				Earthquake Y Mode 2	-2.7	-24.1	1.6	-24.2	1.3	0.1	-2.3	48.9	-2.4	-15.5	1.8	-0.0



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 3	30.0	6.00/9.00	Self weight	164.2	6.6	-1.2	5.7	-0.9	-0.1	142.1	-9.0	1.2	3.1	-0.4	-0.5				
				Dead load	80.0	1.5	0.2	1.3	0.1	-0.1	77.9	-1.5	-0.6	0.6	1.0	-0.6				
				Live load	41.9	3.2	-0.8	2.8	-0.6	-0.0	40.9	-4.7	0.9	1.5	-0.4	-0.3				
				Wind +X ecc.+	3.8	8.2	0.1	7.7	0.1	-0.0	3.6	-14.9	-0.2	4.9	0.3	-0.1				
				Wind +X ecc.-	4.6	7.7	0.3	7.2	0.3	0.0	4.4	-14.0	-0.6	4.7	0.6	-0.1				
				Wind -X ecc.+	-3.8	-8.2	-0.1	-7.7	-0.1	0.0	-3.6	14.9	0.2	-4.9	-0.3	0.1				
				Wind -X ecc.-	-4.6	-7.7	-0.3	-7.2	-0.3	-0.0	-4.4	14.0	0.6	-4.7	-0.6	0.1				
				Wind +Y ecc.+	10.4	-3.1	3.4	-2.6	2.7	-0.0	10.1	4.9	-5.3	-1.6	4.5	-0.5				
				Wind +Y ecc.-	6.6	-0.8	2.3	-0.6	1.8	-0.2	6.5	1.0	-3.5	-0.4	3.0	-0.5				
				Wind -Y ecc.+	-10.4	3.1	-3.4	2.6	-2.7	0.0	-10.1	-4.9	5.3	1.6	-4.5	0.5				
				Wind -Y ecc.-	-6.6	0.8	-2.3	0.6	-1.8	0.2	-6.5	-1.0	3.5	0.4	-3.0	0.5				
				Earthquake X Mode 1	38.1	16.0	7.4	14.2	5.6	0.5	37.1	-26.1	-11.3	9.2	10.0	-0.6				
				Earthquake X Mode 2	-28.1	-120.1	6.8	-103.0	5.2	0.4	-27.7	190.7	-9.4	-66.5	7.0	-0.1				
				Earthquake X Mode 3	8.8	2.8	2.3	2.4	1.8	-0.2	8.6	-4.5	-3.5	1.6	3.0	-0.6				
				Earthquake X Mode 4	-5.5	-1.9	-0.2	-0.2	-0.1	-0.0	-5.7	-1.3	0.1	-0.1	-0.2	0.0				
				Earthquake X Mode 5	9.7	12.9	-0.2	2.0	-0.1	-0.0	11.5	5.9	-0.1	1.3	0.0	-0.0				
				Earthquake X Mode 6	-1.4	-0.2	-0.1	0.0	-0.0	0.0	-1.4	-0.2	0.1	0.0	-0.1	0.0				
				Earthquake X Mode 7	0.2	-0.9	-0.1	-0.7	-0.1	-0.0	0.3	1.1	0.2	-0.5	-0.1	-0.0				
				Earthquake X Mode 8	0.4	-1.3	-0.3	-1.0	-0.2	0.0	0.5	1.6	0.5	-0.7	-0.4	0.0				
				Earthquake X Mode 9	0.1	-8.2	0.3	-6.2	0.3	0.0	0.5	10.2	-0.5	-4.5	0.4	-0.0				
				Earthquake Y Mode 1	17.3	7.3	3.3	6.4	2.6	0.2	16.9	-11.8	-5.1	4.2	4.6	-0.3				
				Earthquake Y Mode 2	-8.7	-37.1	2.1	-31.8	1.6	0.1	-8.6	58.9	-2.9	-20.5	2.2	-0.0				
				Earthquake Y Mode 3	54.2	17.2	14.0	15.1	10.8	-1.0	53.1	-27.5	-21.5	9.8	18.7	-3.4				
				Earthquake Y Mode 4	-1.1	-0.4	-0.0	-0.0	-0.0	-0.0	-1.1	-0.3	0.0	-0.0	-0.0	0.0				
				Earthquake Y Mode 5	1.8	2.3	-0.0	0.4	-0.0	-0.0	2.1	1.1	-0.0	0.2	0.0	-0.0				
				Earthquake Y Mode 6	-11.2	-1.5	-0.8	0.1	-0.4	0.0	-11.3	-1.9	0.5	0.0	-0.7	0.3				
				Earthquake Y Mode 7	0.1	-0.3	-0.0	-0.2	-0.0	-0.0	0.1	0.3	0.0	-0.1	-0.0	0.0				
				Earthquake Y Mode 8	0.9	-3.2	-0.8	-2.5	-0.6	0.0	1.1	4.1	1.1	-1.8	-1.0	0.1				
				Earthquake Y Mode 9	0.0	-3.0	0.1	-2.3	0.1	0.0	0.2	3.7	-0.2	-1.6	0.1	-0.0				
					Floor 2	30.0	3.00/6.00	Self weight	219.8	4.6	-0.6	3.9	-0.5	-0.1	197.2	-5.0	0.5	1.8	0.2	-0.6
								Dead load	109.0	1.2	0.3	1.0	0.2	-0.1	106.7	-0.4	-0.7	0.4	1.1	-0.5
								Live load	59.5	2.3	-0.5	2.0	-0.4	-0.0	58.3	-3.1	0.5	1.0	-0.1	-0.3
								Wind +X ecc.+	7.9	12.9	0.1	9.7	0.1	-0.0	7.9	-16.3	-0.2	6.4	0.3	-0.1
								Wind +X ecc.-	9.2	12.3	0.4	9.2	0.3	0.0	9.1	-15.4	-0.7	6.1	0.7	-0.1
								Wind -X ecc.+	-7.9	-12.9	-0.1	-9.7	-0.1	0.0	-7.9	16.3	0.2	-6.4	-0.3	0.1
								Wind -X ecc.-	-9.2	-12.3	-0.4	-9.2	-0.3	-0.0	-9.1	15.4	0.7	-6.1	-0.7	0.1
Wind +Y ecc.+	17.1	-3.1	4.1					-2.5	3.1	-0.0	16.7	4.6	-6.0	-1.6	5.3	-0.7				
Wind +Y ecc.-	11.3	-0.3	2.8					-0.2	2.1	-0.2	11.0	0.5	-4.1	-0.1	3.6	-0.7				
Wind -Y ecc.+	-17.1	3.1	-4.1					2.5	-3.1	0.0	-16.7	-4.6	6.0	1.6	-5.3	0.7				
Wind -Y ecc.-	-11.3	0.3	-2.8					0.2	-2.1	0.2	-11.0	-0.5	4.1	0.1	-3.6	0.7				
Earthquake X Mode 1	62.1	25.5	7.9					17.5	5.8	0.5	61.5	-26.5	-11.4	11.6	10.5	-0.8				
Earthquake X Mode 2	-59.6	-160.2	7.5					-114.1	5.5	0.4	-62.1	184.6	-9.4	-74.8	7.1	-0.1				
Earthquake X Mode 3	14.5	4.4	2.5					3.1	1.9	-0.2	14.3	-4.6	-3.7	2.0	3.3	-0.6				
Earthquake X Mode 4	-4.3	1.3	0.4					1.9	0.4	0.0	-4.6	-4.2	-0.8	1.3	0.6	0.0				
Earthquake X Mode 5	5.7	-9.1	0.4					-12.2	0.4	0.0	7.5	26.7	-0.7	-8.4	0.5	0.0				
Earthquake X Mode 6	-1.1	0.1	0.2					0.2	0.1	-0.0	-1.1	-0.5	-0.3	0.1	0.2	-0.0				
Earthquake X Mode 7	-0.1	-0.5	-0.0					-0.1	-0.0	-0.0	-0.1	-0.2	-0.0	-0.0	-0.0	0.0				
Earthquake X Mode 8	-0.1	-0.7	-0.1					-0.1	-0.0	0.0	-0.2	-0.4	0.0	-0.1	-0.1	0.0				
Earthquake X Mode 9	-0.9	-4.0	0.1					-0.5	0.0	0.0	-1.5	-2.2	0.0	-0.2	0.0	-0.0				
Earthquake Y Mode 1	28.2	11.6	3.6					7.9	2.6	0.2	27.9	-12.0	-5.2	5.3	4.8	-0.4				
Earthquake Y Mode 2	-18.4	-49.5	2.3					-35.2	1.7	0.1	-19.2	57.0	-2.9	-23.1	2.2	-0.0				
Earthquake Y Mode 3	89.0	27.3	15.6					18.9	11.6	-1.1	88.0	-28.5	-22.6	12.6	20.3	-3.9				
Earthquake Y Mode 4	-0.8	0.3	0.1					0.4	0.1	0.0	-0.9	-0.8	-0.1	0.2	0.1	0.0				
Earthquake Y Mode 5	1.0	-1.7	0.1					-2.2	0.1	0.0	1.4	4.9	-0.1	-1.5	0.1	0.0				
Earthquake Y Mode 6	-9.2	1.1	1.4					1.8	1.2	-0.1	-9.4	-4.1	-2.4	1.2	1.9	-0.2				
Earthquake Y Mode 7	-0.0	-0.1	-0.0					-0.0	-0.0	-0.0	-0.0	-0.1	-0.0	-0.0	-0.0	0.0				
Earthquake Y Mode 8	-0.3	-1.7	-0.2					-0.2	-0.1	0.0	-0.6	-0.9	0.1	-0.1	-0.2	0.1				
Earthquake Y Mode 9	-0.3	-1.5	0.0					-0.2	0.0	0.0	-0.6	-0.8	0.0	-0.1	0.0	-0.0				
	Floor 1	30.0	0.00/3.00					Self weight	273.6	3.0	0.0	1.9	-0.1	-0.1	250.6	0.6	-0.2	0.5	0.7	-0.6
								Dead load	138.0	0.7	0.2	0.5	0.1	-0.1	135.4	0.8	-0.6	0.1	1.0	-0.5
								Live load	76.4	1.5	-0.1	0.9	-0.1	-0.0	75.1	-0.5	0.1	0.3	0.3	-0.3
								Wind +X ecc.+	12.7	21.6	0.0	10.7	0.0	-0.0	13.2	-10.4	-0.2	7.6	0.3	-0.1
								Wind +X ecc.-	14.3	20.7	0.3	10.2	0.2	0.0	14.8	-9.8	-0.4	7.3	0.5	-0.1
								Wind -X ecc.+	-12.7	-21.6	-0.0	-10.7	-0.0	0.0	-13.2	10.4	0.2	-7.6	-0.3	0.1
								Wind -X ecc.-	-14.3	-20.7	-0.3	-10.2	-0.2	-0.0	-14.8	9.8	0.4	-7.3	-0.5	0.1
				Wind +Y ecc.+	23.5	-2.6	3.7	-1.7	2.4	-0.0	23.0	2.8	-4.3	-1.1	4.1	-0.6				
				Wind +Y ecc.-	16.1	1.6	2.6	0.7	1.7	-0.2	15.8	-0.0	-3.1	0.6	3.0	-0.6				
				Wind -Y ecc.+	-23.5	2.6	-3.7	1.7	-2.4	0.0	-23.0	-2.8	4.3	1.1	-4.1	0.6				
				Wind -Y ecc.-	-16.1	-1.6	-2.6	-0.7	-1.7	0.2	-15.8	0.0	3.1	-0.6	-3.0	0.6				
				Earthquake X Mode 1	84.2	40.1	5.8	18.1	3.8	0.4	84.6	-13.2	-6.8	13.0	6.9	-0.8				
				Earthquake X Mode 2	-96.0	-225.3	6.4	-108.2	3.9	0.2	-104.0	100.6	-5.5	-76.5	4.5	-0.1				
				Earthquake X Mode 3	19.9	7.9	2.1	3.6	1.4	-0.1	19.9	-2.6	-2.5	2.6	2.4	-0.5				
				Earthquake X Mode 4	-1.9	4.9	0.6	2.7	0.4	0.1	-2.0	-3.3	-0.7	2.0	0.7	-0.0				
				Earthquake X Mode 5	-1.1	-32.6	0.7	-18.4	0.4	0.0	-1.1	22.3	-0.6	-13.3	0.5	0.0				
				Earthquake X Mode 6	-0.6	0.6	0.3	0.3	0.2	-0.0	-0.6	-0.4	-0.3	0.2	0.3	-0.0				
				Earthquake X Mode 7	0.2	1.1	0.1	0.7	0.1	0.0	0.1	-1.0	-0.1	0.5	0.1	0.0				
				Earthquake X Mode 8	0.3	1.6	0.3	1.0	0.2	-0.0	0.2	-1.4	-0.3	0.8	0.3	-0.0				
				Earthquake X Mode 9	0.4	9.8	-0.3	6.5	-0.2	-0.0	-0.2	-9.2	0.4	4.9	-0.3	-0.0				
				Earthquake Y Mode 1	38.2	18.2	2.6	8.2	1.7	0.2	38.4	-6.0	-3.1	5.9	3.1	-0.3				
				Earthquake Y Mode 2	-29.7	-69.6	2.0	-33.4	1.2	0.1	-32.1	31.1	-1.7	-23.6	1.4	-0.0				
				Earthquake Y Mode 3	122.4	48.3	12.9	22.0	8.5	-0.8	122.5	-16.2	-15.2	16.0	14.9	-3.2				
				Earthquake Y Mode 4	-0.4	0.9	0.1	0.5	0.1	0.0	-0.4	-0.6	-0.1	0.4	0.1	-0.0				
				Earthquake Y Mode 5	-0.2	-5.9	0.1	-3.4	0.1	0.0	-0.2	4.1	-0.1	-2.4	0.1	0.0				
				Earthquake Y Mode 6	-4.6	4.9	2.1	2.7	1.5	-0.1	-4.7	-3.2	-2.7	2.0	2.5	-0.4				
				Earthquake Y Mode 7	0.1	0.3	0.0	0.2	0.0	0.0	0.0	-0.3	-0.0	0.2	0.0	0.0				
				Earthquake Y Mode 8	0.8	3.9	0.6	2.6	0.5	-0.0	0.6	-3.6	-0.9	2.0	0.7	-0.2				
				Earthquake Y Mode 9	0.1	3.6	-0.1	2.4	-0.1	-0.0	-0.1	-3.4	0.1	1.8	-0.1	0.0				



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
W59	techo	30.0	12.00/15.00	Self weight	41.9	8.7	-0.4	8.4	-0.5	0.1	20.4	-14.9	1.4	4.1	-1.0	0.1			
				Dead load	22.5	2.9	1.0	2.3	1.1	0.0	21.3	-3.5	-2.6	1.4	1.7	0.2			
				Live load	5.0	3.6	-0.1	3.8	-0.1	0.0	4.4	-7.2	0.2	1.9	-0.2	0.1			
				Wind +X ecc.+	0.7	1.9	-0.1	2.9	-0.1	0.0	0.4	-6.2	0.2	1.2	-0.1	-0.0			
				Wind +X ecc.-	0.5	2.0	-0.0	3.0	0.0	0.0	0.2	-6.5	-0.0	1.3	0.0	0.0			
				Wind -X ecc.+	-0.7	-1.9	0.1	-2.9	0.1	-0.0	-0.4	6.2	-0.2	-1.2	0.1	0.0			
				Wind -X ecc.-	-0.5	-2.0	0.0	-3.0	-0.0	-0.0	-0.2	6.5	0.0	-1.3	0.0	-0.0			
				Wind +Y ecc.+	-2.0	1.3	1.6	1.3	1.3	-0.0	-2.0	-2.6	-2.6	0.7	2.0	-0.1			
				Wind +Y ecc.-	-1.1	0.7	1.0	0.6	0.9	-0.1	-1.1	-1.2	-1.7	0.4	1.3	-0.1			
				Wind -Y ecc.+	2.0	-1.3	-1.6	-1.3	-1.3	0.0	2.0	2.6	2.6	-0.7	-2.0	0.1			
				Wind -Y ecc.-	1.1	-0.7	-1.0	-0.6	-0.9	0.1	1.1	1.2	1.7	-0.4	-1.3	0.1			
				Earthquake X Mode 1	-2.8	11.6	3.4	14.9	2.8	0.4	-4.0	-30.7	-5.5	7.0	4.4	0.2			
				Earthquake X Mode 2	-18.3	-32.0	5.9	-41.4	4.8	0.2	-13.5	85.7	-9.5	-18.4	7.5	-0.0			
				Earthquake X Mode 3	-0.8	1.8	1.1	2.1	0.9	-0.1	-0.9	-4.1	-1.8	1.0	1.4	-0.2			
				Earthquake X Mode 4	-0.5	-4.7	-0.7	-4.2	-0.5	-0.1	-0.2	7.2	1.0	-2.2	-0.8	-0.1			
				Earthquake X Mode 5	7.0	18.6	-1.2	16.1	-0.9	-0.0	5.4	-27.0	1.8	8.4	-1.5	-0.0			
				Earthquake X Mode 6	0.2	-0.4	-0.3	-0.3	-0.2	0.0	0.2	0.6	0.4	-0.2	-0.4	0.0			
				Earthquake X Mode 7	0.3	1.9	0.1	1.3	0.1	0.0	0.2	-1.7	-0.1	0.7	0.1	0.0			
				Earthquake X Mode 8	0.1	1.6	0.3	1.0	0.2	-0.0	0.0	-1.4	-0.4	0.6	0.4	-0.0			
				Earthquake X Mode 9	2.5	8.8	-0.5	5.9	-0.3	-0.0	2.0	-7.9	0.6	3.5	-0.5	0.0			
				Earthquake Y Mode 1	-1.3	5.3	1.5	6.8	1.3	0.2	-1.8	-13.9	-2.5	3.2	2.0	0.1			
				Earthquake Y Mode 2	-5.6	-9.9	1.8	-12.8	1.5	0.0	-4.2	26.5	-2.9	-5.7	2.3	-0.0			
				Earthquake Y Mode 3	-4.8	10.9	6.8	12.6	5.5	-0.5	-5.8	-25.0	-11.0	6.2	8.7	-1.1			
				Earthquake Y Mode 4	-0.1	-0.9	-0.1	-0.8	-0.1	-0.0	-0.0	1.4	0.2	-0.4	-0.2	-0.0			
				Earthquake Y Mode 5	1.3	3.4	-0.2	2.9	-0.2	-0.0	1.0	-4.9	0.3	1.5	-0.3	-0.0			
				Earthquake Y Mode 6	1.4	-3.0	-2.4	-2.7	-1.9	0.1	1.6	4.6	3.7	-1.4	-3.0	0.3			
				Earthquake Y Mode 7	0.1	0.6	0.0	0.4	0.0	0.0	0.1	-0.5	-0.0	0.2	0.0	0.0			
				Earthquake Y Mode 8	0.3	3.9	0.8	2.6	0.6	-0.0	0.1	-3.4	-1.1	1.5	0.9	-0.1			
				Earthquake Y Mode 9	0.9	3.2	-0.2	2.2	-0.1	-0.0	0.7	-2.9	0.2	1.3	-0.2	0.0			
				Floor 4	30.0	9.00/12.00	Self weight	97.8	6.5	-0.0	5.3	0.1	0.0	76.3	-8.9	0.3	2.9	-1.0	0.7
							Dead load	49.2	1.2	-0.2	1.1	-0.2	0.1	47.5	-1.7	0.7	0.5	-0.9	0.3
							Live load	21.3	2.8	0.1	2.2	0.1	0.0	20.6	-3.9	0.0	1.2	-0.3	0.3
	Wind +X ecc.+	1.3	4.4				-0.1	5.1	-0.1	0.0	1.1	-10.9	0.2	3.2	-0.2	0.0			
	Wind +X ecc.-	0.9	4.5				0.1	5.2	0.1	0.0	0.7	-11.2	-0.1	3.3	0.0	0.0			
	Wind -X ecc.+	-1.3	-4.4				0.1	-5.1	0.1	-0.0	-1.1	10.9	-0.2	-3.2	0.2	-0.0			
	Wind -X ecc.-	-0.9	-4.5				-0.1	-5.2	-0.1	-0.0	-0.7	11.2	0.1	-3.3	-0.0	-0.0			
	Wind +Y ecc.+	-4.6	0.9				2.4	0.8	1.9	-0.0	-4.5	-1.7	-3.9	0.6	3.2	-0.4			
	Wind +Y ecc.-	-2.7	0.3				1.6	0.2	1.3	-0.1	-2.6	-0.3	-2.6	0.1	2.1	-0.4			
	Wind -Y ecc.+	4.6	-0.9				-2.4	-0.8	-1.9	0.0	4.5	1.7	3.9	-0.6	-3.2	0.4			
	Wind -Y ecc.-	2.7	-0.3				-1.6	-0.2	-1.3	0.1	2.6	0.3	2.6	-0.1	-2.1	0.4			
Earthquake X Mode 1	-6.5	20.2	5.1				21.2	4.0	0.5	-6.8	-43.7	-7.9	13.6	6.6	-0.2				
Earthquake X Mode 2	-36.2	-65.2	7.8				-67.4	6.0	0.2	-34.0	137.2	-12.4	-42.8	11.3	-1.2				
Earthquake X Mode 3	-2.1	2.4	1.7				2.4	1.3	-0.1	-2.1	-4.8	-2.6	1.5	2.2	-0.4				
Earthquake X Mode 4	-0.9	-6.0	-0.6				-3.6	-0.4	-0.1	-1.1	4.8	0.8	-2.4	-0.7	0.0				
Earthquake X Mode 5	12.8	22.3	-0.9				12.8	-0.7	-0.0	13.5	-16.6	1.4	8.5	-1.4	0.2				
Earthquake X Mode 6	0.4	-0.4	-0.3				-0.2	-0.2	0.0	0.4	0.3	0.4	-0.2	-0.3	0.1				
Earthquake X Mode 7	0.4	0.6	-0.0				-0.2	-0.0	-0.0	0.5	1.0	0.1	-0.1	-0.0	-0.0				
Earthquake X Mode 8	0.0	0.4	-0.0				-0.2	-0.0	-0.0	0.2	0.9	0.1	-0.1	-0.0	-0.0				
Earthquake X Mode 9	2.9	2.0	0.0				-1.2	0.1	0.0	3.7	5.3	-0.1	-1.0	0.0	0.0				
Earthquake Y Mode 1	-3.0	9.2	2.3				9.6	1.8	0.2	-3.1	-19.9	-3.6	6.2	3.0	-0.1				
Earthquake Y Mode 2	-11.2	-20.1	2.4				-20.8	1.9	0.0	-10.5	42.4	-3.8	-13.2	3.5	-0.4				
Earthquake Y Mode 3	-13.0	14.9	10.2				14.6	8.0	-0.8	-12.8	-29.5	-16.0	9.4	13.4	-2.4				
Earthquake Y Mode 4	-0.2	-1.2	-0.1				-0.7	-0.1	-0.0	-0.2	0.9	0.1	-0.5	-0.1	0.0				
Earthquake Y Mode 5	2.3	4.1	-0.2				2.3	-0.1	-0.0	2.4	-3.0	0.3	1.6	-0.3	0.0				
Earthquake Y Mode 6	3.2	-3.3	-2.3				-1.9	-1.6	0.1	3.0	2.4	3.0	-1.3	-2.7	0.5				
Earthquake Y Mode 7	0.1	0.2	-0.0				-0.1	-0.0	-0.0	0.2	0.3	0.0	-0.0	-0.0	-0.0				
Earthquake Y Mode 8	0.1	1.0	-0.0				-0.5	-0.1	-0.0	0.5	2.3	0.2	-0.4	-0.1	-0.1				
Earthquake Y Mode 9	1.1	0.7	0.0				-0.5	0.0	0.0	1.3	1.9	-0.0	-0.4	0.0	0.0				
Floor 3	30.0	6.00/9.00	Self weight				151.4	5.8	-0.1	5.0	-0.0	0.0	129.4	-7.9	0.4	2.7	-0.9	0.6	
			Dead load				74.0	0.7	-0.2	0.6	-0.1	0.1	72.1	-0.3	0.5	0.3	-0.8	0.4	
			Live load				37.1	2.6	0.1	2.3	0.1	0.0	36.1	-4.1	-0.0	1.3	-0.3	0.3	
			Wind +X ecc.+	3.8	8.1	-0.1	7.6	-0.1	0.0	3.6	-14.8	0.3	4.9	-0.3	0.1				
			Wind +X ecc.-	3.1	8.3	0.1	7.8	0.1	0.0	2.9	-15.1	-0.1	5.0	0.0	0.1				
			Wind -X ecc.+	-3.8	-8.1	0.1	-7.6	0.1	-0.0	-3.6	14.8	-0.3	-4.9	0.3	-0.1				
			Wind -X ecc.-	-3.1	-8.3	-0.1	-7.8	-0.1	-0.0	-2.9	15.1	0.1	-5.0	-0.0	-0.1				
			Wind +Y ecc.+	-8.1	0.7	3.4	0.7	2.7	-0.0	-7.9	-1.6	-5.3	0.5	4.5	-0.6				
			Wind +Y ecc.-	-5.0	-0.1	2.3	-0.1	1.8	-0.2	-4.8	0.0	-3.5	0.0	3.0	-0.5				
			Wind -Y ecc.+	8.1	-0.7	-3.4	-0.7	-2.7	0.0	7.9	1.6	5.3	-0.5	-4.5	0.6				
			Wind -Y ecc.-	5.0	0.1	-2.3	0.1	-1.8	0.2	4.8	-0.0	3.5	-0.0	-3.0	0.5				
			Earthquake X Mode 1	-6.0	31.9	6.6	28.1	5.1	0.6	-6.0	-52.9	-9.9	18.3	8.3	-0.3				
			Earthquake X Mode 2	-76.0	-105.9	9.7	-91.0	7.4	0.1	-74.4	167.9	-15.3	-58.4	14.2	-1.8				
			Earthquake X Mode 3	-3.4	3.4	2.2	2.9	1.7	-0.2	-3.3	-5.4	-3.3	1.9	2.8	-0.5				
			Earthquake X Mode 4	-0.9	-3.5	-0.2	-0.8	-0.1	-0.0	-1.4	-1.0	0.0	-0.5	-0.1	0.0				
			Earthquake X Mode 5	14.9	11.9	-0.2	1.6	-0.1	-0.0	16.6	6.3	0.2	1.0	-0.4	0.1				
			Earthquake X Mode 6	0.5	-0.2	-0.1	-0.0	-0.0	0.0	0.5	-0.1	0.1	-0.0	-0.1	0.0				
			Earthquake X Mode 7	0.0	-1.6	-0.1	-1.2	-0.1	-0.0	0.1	2.0	0.1	-0.9	-0.1	-0.0				
			Earthquake X Mode 8	-0.1	-1.3	-0.3	-1.0	-0.2	0.0	-0.1	1.6	0.4	-0.7	-0.4	0.0				
			Earthquake X Mode 9	0.6	-7.7	0.4	-5.9	0.3	0.0	1.1	9.6	-0.6	-4.2	0.6	-0.1				
			Earthquake Y Mode 1	-2.7	14.5	3.0	12.7	2.3	0.3	-2.7	-24.0	-4.5	8.3	3.8	-0.1				
			Earthquake Y Mode 2	-23.5	-32.7	3.0	-28.1	2.3	0.0	-23.0	51.9	-4.7	-18.0	4.4	-0.6				
			Earthquake Y Mode 3	-20.9	20.7	13.5	17.7	10.4	-1.0	-20.4	-33.0	-20.3	11.6	17.3	-3.2				
			Earthquake Y Mode 4	-0.2	-0.7	-0.0	-0.1	-0.0	-0.0	-0.3	-0.2	0.0	-0.1	-0.0	0.0				
			Earthquake Y Mode 5	2.7	2.2	-0.0	0.3	-0.0	-0.0	3.0	1.1	0.0	0.2	-0.1	0.0				
			Earthquake Y Mode 6	4.4	-1.9	-0.7	-0.4	-0.4	0.0	4.0	-0.6	0.5	-0.3	-0.6	0.3				
			Earthquake Y Mode 7	0.0	-0.5	-0.0	-0.4	-0.0	-0.0	0.0	0.6	0.0	-0.3	-0.0	-0.0				
			Earthquake Y Mode 8	-0.4	-3.2	-0.8	-2.4	-0.6	0.0	-0.2	3.9	1.1	-1.8	-0.9	0.1				
Earthquake Y Mode 9	0.2	-2.8	0.2	-2.1	0.1	0.0	0.4	3.5	-0.2	-1.5	0.2	-0.1							



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	30.0	3.00/6.00	Self weight	203.1	3.7	-0.2	3.3	-0.0	0.0	180.7	-4.2	0.3	1.5	-0.8	0.5
				Dead load	99.2	0.6	-0.3	0.4	-0.2	0.1	97.0	0.5	0.7	0.1	-0.9	0.4
				Live load	51.9	1.7	0.1	1.5	0.1	0.0	50.9	-2.5	-0.0	0.7	-0.2	0.2
				Wind +X ecc.+	7.9	12.8	-0.1	9.6	-0.1	0.0	7.8	-16.1	0.3	6.3	-0.4	0.1
				Wind +X ecc.-	6.9	13.0	0.1	9.8	0.1	0.0	6.9	-16.5	-0.1	6.4	0.0	0.1
				Wind -X ecc.+	-7.9	-12.8	0.1	-9.6	0.1	-0.0	-7.8	16.1	-0.3	-6.3	0.4	-0.1
				Wind -X ecc.-	-6.9	-13.0	-0.1	-9.8	-0.1	-0.0	-6.9	16.5	0.1	-6.4	-0.0	-0.1
				Wind +Y ecc.+	-12.3	0.5	4.2	0.4	3.1	-0.0	-12.0	-0.9	-6.1	0.4	5.3	-0.7
				Wind +Y ecc.-	-7.8	-0.5	2.8	-0.4	2.1	-0.2	-7.7	0.6	-4.1	-0.2	3.6	-0.7
				Wind -Y ecc.+	12.3	-0.5	-4.2	-0.4	-3.1	0.0	12.0	0.9	6.1	-0.4	-5.3	0.7
				Wind -Y ecc.-	7.8	0.5	-2.8	0.4	-2.1	0.2	7.7	-0.6	4.1	0.2	-3.6	0.7
				Earthquake X Mode 1	-2.0	43.2	7.3	31.0	5.3	0.6	-1.1	-50.7	-10.0	20.6	8.7	-0.4
				Earthquake X Mode 2	-130.1	-146.1	10.3	-103.1	7.6	0.1	-130.8	164.5	-15.6	-67.2	14.9	-2.1
				Earthquake X Mode 3	-4.6	4.2	2.5	2.9	1.8	-0.2	-4.4	-4.8	-3.5	2.0	3.1	-0.6
				Earthquake X Mode 4	-0.1	1.8	0.4	2.7	0.4	0.0	-0.6	-6.0	-0.7	1.9	0.6	0.0
				Earthquake X Mode 5	10.3	-8.6	0.6	-11.6	0.5	0.0	11.9	25.4	-1.1	-8.0	0.9	-0.1
				Earthquake X Mode 6	0.5	0.1	0.2	0.2	0.1	-0.0	0.5	-0.3	-0.3	0.1	0.2	-0.0
				Earthquake X Mode 7	-0.2	-0.8	-0.0	-0.1	-0.0	-0.0	-0.3	-0.4	-0.0	-0.1	0.0	0.0
				Earthquake X Mode 8	-0.2	-0.7	-0.1	-0.1	-0.0	0.0	-0.3	-0.4	0.0	-0.0	-0.1	0.0
				Earthquake X Mode 9	-0.8	-3.8	0.1	-0.5	0.0	-0.0	-1.4	-2.0	-0.1	-0.2	0.1	-0.1
				Earthquake Y Mode 1	-0.9	19.6	3.3	14.1	2.4	0.3	-0.5	-23.0	-4.5	9.3	3.9	-0.2
				Earthquake Y Mode 2	-40.2	-45.1	3.2	-31.9	2.4	0.0	-40.4	50.8	-4.8	-20.8	4.6	-0.7
				Earthquake Y Mode 3	-28.5	25.9	15.2	18.1	11.2	-1.1	-27.4	-29.3	-21.5	12.2	18.8	-3.6
				Earthquake Y Mode 4	-0.0	0.3	0.1	0.5	0.1	0.0	-0.1	-1.2	-0.1	0.4	0.1	0.0
				Earthquake Y Mode 5	1.9	-1.6	0.1	-2.1	0.1	0.0	2.2	4.6	-0.2	-1.4	0.2	-0.0
				Earthquake Y Mode 6	4.4	0.8	1.4	1.2	1.2	-0.1	4.1	-2.8	-2.4	0.9	1.9	-0.2
				Earthquake Y Mode 7	-0.1	-0.3	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.0	-0.0	0.0	0.0
				Earthquake Y Mode 8	-0.5	-1.6	-0.2	-0.1	-0.1	0.0	-0.8	-1.1	0.1	-0.1	-0.1	0.1
				Earthquake Y Mode 9	-0.3	-1.4	0.0	-0.2	0.0	-0.0	-0.5	-0.7	-0.0	-0.1	0.0	-0.0
	Floor 1	30.0	0.00/3.00	Self weight	251.1	2.4	0.0	1.4	-0.0	0.0	228.4	1.1	0.4	0.2	-0.5	0.3
				Dead load	125.0	0.4	-0.1	0.3	-0.2	0.0	122.6	1.3	0.7	-0.1	-0.8	0.4
				Live load	65.1	1.0	0.1	0.6	0.0	0.0	64.0	-0.1	0.1	0.1	-0.2	0.2
				Wind +X ecc.+	12.6	21.6	-0.1	10.7	-0.1	0.0	13.1	-10.3	0.2	7.6	-0.3	0.1
				Wind +X ecc.-	11.4	22.0	0.2	10.9	0.1	0.0	12.0	-10.5	-0.0	7.8	-0.0	0.1
				Wind -X ecc.+	-12.6	-21.6	0.1	-10.7	0.1	-0.0	-13.1	10.3	-0.2	-7.6	0.3	-0.1
				Wind -X ecc.-	-11.4	-22.0	-0.2	-10.9	-0.1	-0.0	-12.0	10.5	0.0	-7.8	0.0	-0.1
				Wind +Y ecc.+	-16.0	0.7	3.7	0.2	2.5	-0.0	-15.7	-0.1	-4.3	0.3	4.2	-0.7
				Wind +Y ecc.-	-10.6	-1.1	2.6	-0.7	1.8	-0.2	-10.4	0.9	-3.1	-0.4	3.0	-0.6
				Wind -Y ecc.+	16.0	-0.7	-3.7	-0.2	-2.5	0.0	15.7	0.1	4.3	-0.3	-4.2	0.7
				Wind -Y ecc.-	10.6	1.1	-2.6	0.7	-1.8	0.2	10.4	-0.9	3.1	0.4	-3.0	0.6
Earthquake X Mode 1				4.6	63.1	5.6	30.0	3.5	0.4	7.1	-27.4	-5.8	21.6	5.6	-0.4	
Earthquake X Mode 2				-184.6	-210.7	7.4	-100.0	5.0	0.1	-190.6	89.3	-9.9	-70.5	10.3	-1.9	
Earthquake X Mode 3				-5.5	5.8	2.1	2.6	1.4	-0.1	-5.1	-2.2	-2.4	1.9	2.3	-0.5	
Earthquake X Mode 4				1.3	7.8	0.6	4.3	0.4	0.1	1.2	-5.1	-0.7	3.2	0.6	-0.0	
Earthquake X Mode 5				2.2	-30.6	0.8	-17.3	0.6	0.0	2.2	20.9	-1.2	-12.4	1.2	-0.2	
Earthquake X Mode 6				0.5	0.5	0.3	0.2	0.2	-0.0	0.5	-0.2	-0.3	0.2	0.3	-0.0	
Earthquake X Mode 7				0.0	1.9	0.1	1.3	0.1	0.0	-0.1	-1.8	-0.1	1.0	0.1	0.0	
Earthquake X Mode 8				-0.1	1.6	0.3	1.0	0.2	-0.0	-0.2	-1.4	-0.3	0.8	0.3	-0.0	
Earthquake X Mode 9				0.8	9.2	-0.3	6.1	-0.2	-0.0	0.3	-8.6	0.5	4.6	-0.4	0.0	
Earthquake Y Mode 1				2.1	28.6	2.6	13.6	1.6	0.2	3.2	-12.4	-2.6	9.8	2.5	-0.2	
Earthquake Y Mode 2				-57.0	-65.1	2.3	-30.9	1.5	0.0	-58.9	27.6	-3.1	-21.8	3.2	-0.6	
Earthquake Y Mode 3				-33.6	35.6	12.8	16.1	8.4	-0.7	-31.5	-13.6	-14.5	11.9	13.9	-3.0	
Earthquake Y Mode 4				0.2	1.5	0.1	0.8	0.1	0.0	0.2	-1.0	-0.1	0.6	0.1	-0.0	
Earthquake Y Mode 5				0.4	-5.6	0.1	-3.1	0.1	0.0	0.4	3.8	-0.2	-2.3	0.2	-0.0	
Earthquake Y Mode 6				3.8	3.8	2.2	1.9	1.5	-0.1	3.8	-1.9	-2.7	1.5	2.4	-0.4	
Earthquake Y Mode 7				0.0	0.6	0.0	0.4	0.0	0.0	-0.0	-0.5	-0.0	0.3	0.0	0.0	
Earthquake Y Mode 8				-0.2	3.9	0.6	2.6	0.5	-0.0	-0.4	-3.6	-0.8	2.0	0.7	-0.0	
Earthquake Y Mode 9				0.3	3.4	-0.1	2.2	-0.1	-0.0	0.1	-3.1	0.2	1.7	-0.1	0.0	
W11	techo	30.0	12.00/15.00	Self weight	74.6	5.7	-8.9	4.5	-7.6	1.3	53.8	-7.7	10.5	5.5	-0.1	2.2
				Dead load	41.4	6.8	-6.5	5.1	-7.4	1.0	39.8	-8.4	12.9	6.0	-1.7	1.5
				Live load	10.3	2.7	-4.6	2.5	-3.3	0.3	10.0	-4.8	4.8	2.4	-2.3	0.2
				Wind +X ecc.+	0.9	-0.6	0.1	0.8	0.1	0.0	0.9	-3.0	-0.3	0.5	0.4	0.1
				Wind +X ecc.-	0.9	-0.4	0.4	0.8	0.3	0.1	1.0	-2.9	-0.8	0.5	0.8	0.2
				Wind -X ecc.+	-0.9	0.6	-0.1	-0.8	-0.1	-0.0	-0.9	3.0	0.3	-0.5	-0.4	-0.1
				Wind -X ecc.-	-0.9	0.4	-0.4	-0.8	-0.3	-0.1	-1.0	2.9	0.8	-0.5	-0.8	-0.2
				Wind +Y ecc.+	0.5	0.8	2.0	0.4	1.8	0.2	0.8	-0.2	-4.0	0.4	3.3	0.8
				Wind +Y ecc.-	0.6	-0.1	0.8	0.2	0.7	0.0	0.7	-0.7	-1.5	0.2	1.3	0.2
				Wind -Y ecc.+	-0.5	-0.8	-2.0	-0.4	-1.8	-0.2	-0.8	0.2	4.0	-0.4	-3.3	-0.8
				Wind -Y ecc.-	-0.6	0.1	-0.8	-0.2	-0.7	-0.0	-0.7	0.7	1.5	-0.2	-1.3	-0.2
				Earthquake X Mode 1	3.3	2.6	8.0	3.5	7.0	1.2	4.4	-7.8	-15.7	3.0	13.4	3.3
				Earthquake X Mode 2	-6.3	1.1	5.7	-15.6	5.1	0.3	-6.1	50.1	-10.1	-9.9	6.7	1.7
				Earthquake X Mode 3	0.7	0.3	0.8	1.0	0.7	0.1	0.8	-2.7	-1.6	0.7	1.4	0.2
				Earthquake X Mode 4	-0.7	-0.8	-1.8	-0.7	-1.4	-0.2	-0.9	1.3	3.1	-0.6	-2.7	-0.6
				Earthquake X Mode 5	-5.5	13.5	-1.4	10.9	-1.1	-0.1	-4.9	-19.3	2.2	8.4	-1.6	-0.5
				Earthquake X Mode 6	-0.0	-0.3	-0.2	-0.2	-0.2	-0.0	-0.1	0.5	0.4	-0.2	-0.3	-0.1
				Earthquake X Mode 7	0.2	-0.0	0.5	-0.0	0.3	0.1	0.3	-0.0	-0.7	0.0	0.6	0.1
				Earthquake X Mode 8	-0.2	1.3	0.3	0.8	0.2	0.0	-0.1	-1.0	-0.4	0.6	0.4	0.1
				Earthquake X Mode 9	-2.6	8.8	-0.6	5.0	-0.4	-0.0	-2.3	-6.0	0.8	4.0	-0.7	-0.2
				Earthquake Y Mode 1	1.5	1.2	3.6	1.6	3.2	0.6	2.0	-3.6	-7.1	1.4	6.1	1.5
				Earthquake Y Mode 2	-1.9	0.3	1.8	-4.8	1.6	0.1	-1.9	15.5	-3.1	-3.1	2.1	0.5
Earthquake Y Mode 3	4.4	1.8	4.8	5.9	4.2	0.3	5.2	-16.4	-9.6	4.3	8.5	1.5				
Earthquake Y Mode 4	-0.1	-0.2	-0.3	-0.1	-0.3	-0.0	-0.2	0.2	0.6	-0.1	-0.5	-0.1				
Earthquake Y Mode 5	-1.0	2.5	-0.3	2.0	-0.2	-0.0	-0.9	-3.5	0.4	1.5	-0.3	-0.1				
Earthquake Y Mode 6	-0.3	-2.3	-1.9	-2.0	-1.5	-0.1	-0.7	3.8	3.3	-1.6	-2.9	-0.5				
Earthquake Y Mode 7	0.1	-0.0	0.1	-0.0	0.1	0.0	0.1	-0.0	-0.2	0.0	0.2	0.0				
Earthquake Y Mode 8	-0.4	3.3	0.8	1.9	0.6	0.0	-0.2	-2.4	-1.1	1.5	1.0	0.2				
Earthquake Y Mode 9	-0.9	3.2	-0.2	1.8	-0.2	-0.0	-0.8	-2.2	0.3	1.5	-0.2	-0.1				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 4	30.0	9.00/12.00	Self weight	142.2	4.1	-6.9	3.5	-5.2	0.9	120.8	-5.5	6.3	3.3	-0.2	0.7				
				Dead load	60.7	7.6	-1.1	6.7	-0.5	0.2	59.7	-12.0	-0.2	4.4	0.8	-0.0				
				Live load	34.7	2.9	-5.2	2.4	-4.0	0.6	33.8	-4.5	5.6	2.3	-1.4	0.3				
				Wind +X ecc.+	-0.3	1.4	0.1	2.8	0.1	0.0	-0.3	-7.2	-0.2	1.8	0.2	0.0				
				Wind +X ecc.-	-0.1	1.3	0.4	2.6	0.4	0.1	-0.0	-6.6	-0.8	1.7	0.7	0.2				
				Wind -X ecc.+	0.3	-1.4	-0.1	-2.8	-0.1	-0.0	0.3	7.2	0.2	-1.8	-0.2	-0.0				
				Wind -X ecc.-	0.1	-1.3	-0.4	-2.6	-0.4	-0.1	0.0	6.6	0.8	-1.7	-0.7	-0.2				
				Wind +Y ecc.+	1.9	0.2	2.6	-0.3	2.2	0.3	2.2	1.0	-4.3	-0.1	3.5	0.8				
				Wind +Y ecc.-	1.0	0.3	1.0	0.7	0.8	0.0	1.1	-1.7	-1.6	0.4	1.3	0.2				
				Wind -Y ecc.+	-1.9	-0.2	-2.6	0.3	-2.2	-0.3	-2.2	-1.0	4.3	0.1	-3.5	-0.8				
				Wind -Y ecc.-	-1.0	-0.3	-1.0	-0.7	-0.8	-0.0	-1.1	1.7	1.6	-0.4	-1.3	-0.2				
				Earthquake X Mode 1	5.5	4.5	9.9	5.1	8.1	1.6	6.6	-10.9	-16.3	3.4	13.4	3.3				
				Earthquake X Mode 2	21.7	-31.0	7.5	-43.6	6.1	0.4	20.9	101.3	-11.4	-27.8	8.0	2.4				
				Earthquake X Mode 3	0.2	1.5	1.0	2.1	0.8	0.1	0.3	-4.8	-1.6	1.3	1.4	0.2				
				Earthquake X Mode 4	-1.2	-1.0	-1.6	-0.6	-1.1	-0.2	-1.4	0.9	1.9	-0.4	-1.7	-0.4				
				Earthquake X Mode 5	-17.3	21.4	-1.2	10.8	-0.8	-0.0	-15.4	-11.1	1.2	7.4	-1.0	-0.4				
				Earthquake X Mode 6	0.0	-0.5	-0.2	-0.3	-0.1	-0.0	-0.0	0.3	0.2	-0.2	-0.2	-0.0				
				Earthquake X Mode 7	0.4	-0.0	0.0	0.0	-0.0	0.0	0.4	-0.1	0.2	0.0	-0.1	0.0				
				Earthquake X Mode 8	-0.3	0.5	0.0	-0.1	-0.0	0.0	-0.1	0.8	0.1	-0.1	-0.0	0.0				
				Earthquake X Mode 9	-3.9	3.1	-0.0	-1.2	0.1	0.0	-2.9	6.2	-0.3	-1.0	0.2	-0.0				
				Earthquake Y Mode 1	2.5	2.0	4.5	2.3	3.7	0.7	3.0	-5.0	-7.4	1.6	6.1	1.5				
				Earthquake Y Mode 2	6.7	-9.6	2.3	-13.5	1.9	0.1	6.5	31.3	-3.5	-8.6	2.5	0.7				
				Earthquake Y Mode 3	1.2	9.5	6.1	12.7	4.9	0.3	2.2	-29.3	-10.0	8.2	8.4	1.1				
				Earthquake Y Mode 4	-0.2	-0.2	-0.3	-0.1	-0.2	-0.0	-0.3	0.2	0.4	-0.1	-0.3	-0.1				
				Earthquake Y Mode 5	-3.1	3.9	-0.2	2.0	-0.1	-0.0	-2.8	-2.0	0.2	1.3	-0.2	-0.1				
				Earthquake Y Mode 6	0.3	-3.7	-1.7	-2.1	-1.2	-0.1	-0.1	2.7	2.1	-1.5	-1.9	-0.3				
				Earthquake Y Mode 7	0.1	-0.0	0.0	0.0	-0.0	0.0	0.1	-0.0	0.1	0.0	-0.0	0.0				
				Earthquake Y Mode 8	-0.7	1.3	0.0	-0.3	-0.1	0.0	-0.4	2.1	0.3	-0.3	-0.1	0.0				
				Earthquake Y Mode 9	-1.4	1.1	-0.0	-0.4	0.0	0.0	-1.1	2.3	-0.1	-0.4	0.1	-0.0				
					Floor 3	30.0	6.00/9.00	Self weight	210.9	3.7	-7.0	3.2	-5.4	1.0	189.1	-4.1	6.9	3.3	-0.4	0.8
								Dead load	80.8	6.6	-2.0	5.6	-1.7	0.3	79.8	-9.2	2.5	3.6	-0.7	0.0
								Live load	59.2	2.5	-4.9	2.1	-3.8	0.5	58.2	-3.6	5.2	2.1	-1.1	0.3
								Wind +X ecc.+	-4.4	4.5	0.1	4.7	0.1	0.1	-4.0	-10.0	-0.2	3.1	0.2	0.0
Wind +X ecc.-	-3.5	4.1	0.6					4.3	0.5	0.1	-3.1	-9.1	-1.0	2.9	0.9	0.2				
Wind -X ecc.+	4.4	-4.5	-0.1					-4.7	-0.1	-0.1	4.0	10.0	0.2	-3.1	-0.2	-0.0				
Wind -X ecc.-	3.5	-4.1	-0.6					-4.3	-0.5	-0.1	3.1	9.1	1.0	-2.9	-0.9	-0.2				
Wind +Y ecc.+	5.1	-0.8	3.5					-0.8	2.8	0.4	5.3	1.6	-5.6	-0.5	4.6	1.0				
Wind +Y ecc.-	1.0	0.8	1.2					1.1	1.0	0.0	1.2	-2.5	-1.9	0.7	1.6	0.2				
Wind -Y ecc.+	-5.1	0.8	-3.5					0.8	-2.8	-0.4	-5.3	-1.6	5.6	0.5	-4.6	-1.0				
Wind -Y ecc.-	-1.0	-0.8	-1.2					-1.1	-1.0	-0.0	-1.2	2.5	1.9	-0.7	-1.6	-0.2				
Earthquake X Mode 1	8.2	7.3	12.7					6.6	10.0	1.9	9.7	-12.7	-19.6	4.5	16.4	4.0				
Earthquake X Mode 2	86.0	-71.2	9.8					-64.1	7.7	0.5	80.6	124.0	-14.0	-42.0	10.5	3.1				
Earthquake X Mode 3	-1.5	3.1	1.2					2.9	1.0	0.1	-1.1	-5.9	-1.9	1.9	1.6	0.2				
Earthquake X Mode 4	-1.5	-0.6	-0.6					-0.1	-0.3	-0.1	-1.7	-0.1	0.3	-0.1	-0.5	-0.2				
Earthquake X Mode 5	-21.7	13.8	-0.4					0.9	-0.1	0.0	-19.2	10.3	-0.1	0.3	-0.1	-0.1				
Earthquake X Mode 6	0.1	-0.3	-0.1					-0.1	-0.0	-0.0	0.0	-0.1	0.0	-0.0	-0.1	-0.0				
Earthquake X Mode 7	0.1	0.1	-0.4					0.0	-0.3	-0.0	0.1	-0.0	0.5	0.0	-0.4	-0.1				
Earthquake X Mode 8	0.1	-1.1	-0.3					-0.9	-0.2	-0.0	0.1	1.4	0.3	-0.7	-0.3	-0.0				
Earthquake X Mode 9	-0.2	-7.7	0.5					-5.7	0.4	0.0	-0.0	8.9	-0.7	-4.2	0.6	0.1				
Earthquake Y Mode 1	3.7	3.3	5.8					3.0	4.5	0.8	4.4	-5.8	-8.9	2.0	7.5	1.8				
Earthquake Y Mode 2	26.6	-22.0	3.0					-19.8	2.4	0.2	24.9	38.3	-4.3	-13.0	3.2	1.0				
Earthquake Y Mode 3	-9.2	19.1	7.5					18.2	5.9	0.3	-7.0	-36.2	-11.6	11.9	9.9	1.2				
Earthquake Y Mode 4	-0.3	-0.1	-0.1					-0.0	-0.1	-0.0	-0.3	-0.0	0.1	-0.0	-0.1	-0.0				
Earthquake Y Mode 5	-4.0	2.5	-0.1					0.2	-0.0	0.0	-3.5	1.9	-0.0	0.1	-0.0	-0.0				
Earthquake Y Mode 6	0.6	-2.7	-0.7					-0.5	-0.3	-0.0	0.2	-0.9	0.2	-0.3	-0.5	-0.1				
Earthquake Y Mode 7	0.0	0.0	-0.1					0.0	-0.1	-0.0	0.0	-0.0	0.2	0.0	-0.1	-0.0				
Earthquake Y Mode 8	0.2	-2.9	-0.6					-2.2	-0.5	-0.0	0.2	3.5	0.9	-1.6	-0.7	-0.1				
Earthquake Y Mode 9	-0.1	-2.8	0.2					-2.1	0.1	0.0	-0.0	3.2	-0.2	-1.5	0.2	0.0				
	Floor 2	30.0	3.00/6.00					Self weight	280.4	2.9	-7.3	2.5	-5.5	1.0	258.2	-1.5	6.7	2.9	-0.5	0.8
								Dead load	101.2	6.4	-2.1	5.3	-1.6	0.2	100.0	-8.0	2.2	3.5	-0.7	-0.0
								Live load	84.4	2.0	-5.2	1.7	-3.9	0.6	83.3	-2.4	5.2	1.9	-1.2	0.3
								Wind +X ecc.+	-11.1	9.1	0.1	6.6	0.1	0.1	-10.3	-10.9	-0.2	4.4	0.2	-0.0
				Wind +X ecc.-	-9.1	8.2	0.7	5.9	0.5	0.1	-8.4	-9.8	-1.0	4.0	0.9	0.2				
				Wind -X ecc.+	11.1	-9.1	-0.1	-6.6	-0.1	-0.1	10.3	10.9	0.2	-4.4	-0.2	0.0				
				Wind -X ecc.-	9.1	-8.2	-0.7	-5.9	-0.5	-0.1	8.4	9.8	1.0	-4.0	-0.9	-0.2				
				Wind +Y ecc.+	9.8	-2.4	4.2	-1.4	3.2	0.4	9.8	1.8	-5.9	-0.9	5.0	1.1				
				Wind +Y ecc.-	0.5	1.5	1.4	1.5	1.0	0.0	0.8	-3.2	-1.9	1.0	1.7	0.2				
				Wind -Y ecc.+	-9.8	2.4	-4.2	1.4	-3.2	-0.4	-9.8	-1.8	5.9	0.9	-5.0	-1.1				
				Wind -Y ecc.-	-0.5	-1.5	-1.4	-1.5	-1.0	-0.0	-0.8	3.2	1.9	-1.0	-1.7	-0.2				
				Earthquake X Mode 1	11.4	9.9	13.8	6.9	10.2	1.9	13.3	-11.0	-19.2	4.7	16.7	4.1				
				Earthquake X Mode 2	177.6	-120.5	10.9	-78.6	7.9	0.5	166.5	119.1	-13.9	-52.7	11.1	3.5				
				Earthquake X Mode 3	-4.2	5.0	1.3	3.6	0.9	0.0	-3.6	-6.0	-1.8	2.4	1.6	0.2				
				Earthquake X Mode 4	-1.4	0.3	0.7	0.4	0.7	0.1	-1.4	-0.8	-1.4	0.3	1.0	0.2				
				Earthquake X Mode 5	-13.4	-5.8	0.7	-10.6	0.6	0.0	-12.1	25.1	-1.4	-7.8	1.0	0.2				
				Earthquake X Mode 6	0.0	0.1	0.1	0.2	0.1	0.0	-0.0	-0.5	-0.2	0.1	0.1	0.0				
				Earthquake X Mode 7	-0.0	0.1	-0.1	0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	-0.0	-0.0				
				Earthquake X Mode 8	0.3	-0.8	-0.1	-0.1	-0.0	-0.0	0.2	-0.4	-0.0	-0.1	-0.0	-0.0				
				Earthquake X Mode 9	2.2	-4.7	0.2	-0.3	0.0	-0.0	1.4	-3.4	0.0	-0.1	0.0	0.0				
				Earthquake Y Mode 1	5.2	4.5	6.3	3.1	4.6	0.9	6.0	-5.0	-8.7	2.1	7.6	1.8				
				Earthquake Y Mode 2	54.9	-37.2	3.4	-24.3	2.5	0.2	51.4	36.8	-4.3	-16.3	3.4	1.1				
				Earthquake Y Mode 3	-26.0	30.6	7.9	22.1	5.7	0.3	-22.5	-36.7	-10.8	14.7	9.6	1.0				
				Earthquake Y Mode 4	-0.3	0.1	0.1	0.1	0.1	0.0	-0.3	-0.2	-0.3	0.1	0.2	0.0				
				Earthquake Y Mode 5	-2.4	-1.1	0.1	-1.9	0.1	0.0	-2.2	4.6	-0.3	-1.4	0.2	0.0				
				Earthquake Y Mode 6	0.1	0.4	0.8	1.5	0.8	0.0	-0.2	-4.1	-1.6	1.1	1.2	0.1				
				Earthquake Y Mode 7	-0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0	-0.0				
				Earthquake Y Mode 8	0.8	-1.9	-0.2	-0.3	-0.0	-0.0	0.5	-1.0	-0.0	-0.1	-0.1	-0.0				
				Earthquake Y Mode 9	0.8	-1.7	0.1	-0.1	0.0	-0.0	0.5	-1.2	0.0	-0.0	0.0	0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 1	30.0	0.00/3.00	Self weight	351.8	3.6	-3.3	2.0	-3.5	0.9	329.1	2.3	4.6	2.8	2.0	0.8				
				Dead load	122.1	3.7	-0.9	3.7	-1.1	0.2	120.8	-5.7	1.7	2.4	-0.1	-0.0				
				Live load	111.1	2.0	-2.3	1.2	-2.4	0.5	109.7	-0.2	3.6	1.6	0.7	0.4				
				Wind +X ecc.+	-18.6	19.9	0.0	8.7	0.0	0.1	-17.1	-6.1	-0.1	6.3	0.1	-0.0				
				Wind +X ecc.-	-15.3	17.6	0.7	7.7	0.4	0.1	-14.0	-5.4	-0.7	5.5	0.7	0.1				
				Wind -X ecc.+	18.6	-19.9	-0.0	-8.7	-0.0	-0.1	17.1	6.1	0.1	-6.3	-0.1	0.0				
				Wind -X ecc.-	15.3	-17.6	-0.7	-7.7	-0.4	-0.1	14.0	5.4	0.7	-5.5	-0.7	-0.1				
				Wind +Y ecc.+	14.4	-4.4	4.3	-1.5	2.6	0.3	14.2	0.1	-4.0	-1.1	4.0	0.8				
				Wind +Y ecc.-	-0.6	6.3	1.3	3.2	0.8	-0.0	-0.3	-3.2	-1.2	2.4	1.2	0.1				
				Wind -Y ecc.+	-14.4	4.4	-4.3	1.5	-2.6	-0.3	-14.2	-0.1	4.0	1.1	-4.0	-0.8				
				Wind -Y ecc.-	0.6	-6.3	-1.3	-3.2	-0.8	0.0	0.3	3.2	1.2	-2.4	-1.2	-0.1				
				Earthquake X Mode 1	14.6	12.6	12.7	5.6	7.6	1.2	16.5	-4.1	-11.8	3.9	12.0	2.8				
				Earthquake X Mode 2	267.8	-219.6	10.5	-89.7	6.1	0.3	250.1	50.9	-8.5	-64.2	8.3	2.7				
				Earthquake X Mode 3	-7.4	10.9	1.0	4.9	0.6	0.0	-6.6	-3.6	-1.0	3.5	1.0	0.1				
				Earthquake X Mode 4	-0.9	0.9	1.5	0.5	1.0	0.1	-0.8	-0.5	-1.5	0.3	1.4	0.3				
				Earthquake X Mode 5	1.1	-32.9	1.3	-17.0	0.8	0.0	-0.0	17.2	-1.3	-12.6	1.2	0.3				
				Earthquake X Mode 6	-0.2	0.8	0.2	0.4	0.1	0.0	-0.1	-0.5	-0.2	0.3	0.2	0.0				
				Earthquake X Mode 7	0.1	-0.1	0.4	-0.1	0.3	0.0	0.1	0.1	-0.5	-0.1	0.4	0.1				
				Earthquake X Mode 8	0.1	1.5	0.2	1.0	0.2	0.0	0.0	-1.3	-0.3	0.8	0.2	0.0				
				Earthquake X Mode 9	-0.3	10.0	-0.5	6.3	-0.3	-0.0	-0.6	-8.4	0.6	4.9	-0.5	-0.1				
				Earthquake Y Mode 1	6.6	5.7	5.8	2.5	3.5	0.6	7.5	-1.9	-5.4	1.8	5.5	1.3				
				Earthquake Y Mode 2	82.7	-67.8	3.2	-27.7	1.9	0.1	77.3	15.7	-2.6	-19.8	2.6	0.8				
				Earthquake Y Mode 3	-45.6	67.3	6.4	30.0	3.8	0.1	-40.5	-22.4	-6.0	21.6	6.2	0.5				
				Earthquake Y Mode 4	-0.2	0.2	0.3	0.1	0.2	0.0	-0.1	-0.1	-0.3	0.1	0.3	0.1				
				Earthquake Y Mode 5	0.2	-6.0	0.2	-3.1	0.2	0.0	-0.0	3.1	-0.2	-2.3	0.2	0.1				
				Earthquake Y Mode 6	-1.2	6.2	1.6	3.4	1.0	0.0	-1.0	-3.8	-1.6	2.5	1.5	0.2				
				Earthquake Y Mode 7	0.0	-0.0	0.1	-0.0	0.1	0.0	0.0	0.0	-0.1	-0.0	0.1	0.0				
				Earthquake Y Mode 8	0.2	3.9	0.6	2.5	0.4	0.0	0.0	-3.4	-0.7	1.9	0.6	0.1				
				Earthquake Y Mode 9	-0.1	3.6	-0.2	2.3	-0.1	-0.0	-0.2	-3.1	0.2	1.8	-0.2	-0.0				
				W12	techo	30.0	12.00/15.00	Self weight	103.4	7.6	-28.4	6.0	-27.1	-0.0	77.8	-10.7	58.4	6.9	-33.9	0.6
								Dead load	72.3	2.3	-11.7	2.7	-20.0	0.2	67.0	-5.9	53.9	2.9	-27.6	0.5
								Live load	18.4	3.3	-14.0	2.4	-10.0	-0.1	17.0	-4.0	17.1	2.8	-11.0	0.2
								Wind +X ecc.+	-1.2	1.1	-0.2	0.9	-0.2	-0.1	-1.2	-1.6	0.4	1.1	-0.1	0.1
								Wind +X ecc.-	-0.9	1.0	-0.7	0.8	0.0	-0.0	-0.8	-1.5	-0.8	1.0	0.0	0.1
								Wind -X ecc.+	1.2	-1.1	0.2	-0.9	0.2	0.1	1.2	1.6	-0.4	-1.1	0.1	-0.1
								Wind -X ecc.-	0.9	-1.0	0.7	-0.8	-0.0	0.0	0.8	1.5	0.8	-1.0	-0.0	-0.1
Wind +Y ecc.+	1.2	-0.4	-3.2					-0.3	2.0	0.2	2.4	0.6	-9.4	-0.5	1.1	0.1				
Wind +Y ecc.-	0.2	0.1	-0.9					0.1	1.0	0.0	0.8	-0.2	-4.1	0.1	0.6	0.0				
Wind -Y ecc.+	-1.2	0.4	3.2					0.3	-2.0	-0.2	-2.4	-0.6	9.4	0.5	-1.1	-0.1				
Wind -Y ecc.-	-0.2	-0.1	0.9					-0.1	-1.0	-0.0	-0.8	0.2	4.1	-0.1	-0.6	-0.0				
Earthquake X Mode 1	1.7	1.0	-9.4					0.8	7.0	0.8	5.6	-1.4	-31.3	0.8	4.2	0.8				
Earthquake X Mode 2	20.7	-18.0	-3.9					-14.0	10.5	1.8	25.1	25.7	-35.6	-17.7	5.6	-0.4				
Earthquake X Mode 3	-0.3	0.7	-1.2					0.6	0.8	-0.0	0.1	-1.0	-3.9	0.6	0.5	0.0				
Earthquake X Mode 4	-0.5	-0.2	-4.1					-0.1	-3.4	-0.2	-1.1	0.2	6.2	-0.1	-2.6	-0.2				
Earthquake X Mode 5	-4.2	3.9	-4.7					2.9	-3.8	-0.3	-4.9	-5.3	6.5	3.7	-2.7	0.1				
Earthquake X Mode 6	-0.0	-0.1	-0.6					-0.1	-0.6	-0.0	-0.1	0.1	1.0	-0.1	-0.4	-0.0				
Earthquake X Mode 7	0.2	0.0	3.6					0.0	1.7	0.0	0.2	-0.0	-1.3	-0.0	1.4	0.0				
Earthquake X Mode 8	-0.0	0.1	2.9					0.1	1.3	0.0	0.1	-0.2	-1.1	0.1	1.1	0.0				
Earthquake X Mode 9	-1.1	0.9	-5.5					0.7	-2.6	-0.1	-1.2	-1.2	2.0	0.9	-2.1	0.0				
Earthquake Y Mode 1	0.8	0.4	-4.3					0.4	3.2	0.3	2.6	-0.6	-14.2	0.4	1.9	0.4				
Earthquake Y Mode 2	6.4	-5.6	-1.2					-4.3	3.2	0.5	7.7	7.9	-11.0	-5.5	1.7	-0.1				
Earthquake Y Mode 3	-2.1	4.3	-7.7					3.4	5.2	-0.3	0.9	-6.0	-24.0	3.9	3.3	0.1				
Earthquake Y Mode 4	-0.1	-0.0	-0.8					-0.0	-0.7	-0.0	-0.2	0.0	1.2	-0.0	-0.5	-0.0				
Earthquake Y Mode 5	-0.8	0.7	-0.9					0.5	-0.7	-0.1	-0.9	-1.0	1.2	0.7	-0.5	0.0				
Earthquake Y Mode 6	-0.3	-0.6	-5.2					-0.5	-4.5	-0.0	-1.1	0.9	8.4	-0.5	-3.5	-0.1				
Earthquake Y Mode 7	0.0	0.0	1.1					0.0	0.5	0.0	0.1	-0.0	-0.4	-0.0	0.4	0.0				
Earthquake Y Mode 8	-0.0	0.4	7.2					0.3	3.4	0.0	0.1	-0.5	-2.8	0.3	2.8	0.0				
Earthquake Y Mode 9	-0.4	0.3	-2.0					0.3	-0.9	-0.0	-0.4	-0.4	0.7	0.3	-0.8	0.0				
	Floor 4	30.0	9.00/12.00					Self weight	203.8	6.4	-23.0	4.8	-15.1	-0.2	180.5	-8.2	27.6	5.1	-24.2	0.1
								Dead load	109.8	-0.5	2.9	-0.5	4.8	0.0	109.6	1.0	-8.9	-0.8	-1.3	-0.2
								Live load	61.4	3.5	-15.1	2.7	-11.2	-0.1	58.9	-4.5	21.3	2.8	-15.3	0.1
								Wind +X ecc.+	-2.1	1.5	-0.2	1.1	-0.2	-0.1	-2.3	-2.0	0.4	1.4	-0.0	0.0
								Wind +X ecc.-	-1.7	1.3	-0.4	1.0	0.5	-0.1	-1.5	-1.8	-1.8	1.2	0.4	0.1
								Wind -X ecc.+	2.1	-1.5	0.2	-1.1	0.2	0.1	2.3	2.0	-0.4	-1.4	0.0	-0.0
								Wind -X ecc.-	1.7	-1.3	0.4	-1.0	-0.5	0.1	1.5	1.8	1.8	-1.2	-0.4	-0.1
				Wind +Y ecc.+	3.0	-0.5	-0.7	-0.4	5.2	0.2	5.1	0.7	-16.7	-0.6	3.3	0.1				
				Wind +Y ecc.-	0.8	0.2	0.1	0.2	2.2	-0.0	1.6	-0.3	-6.6	0.1	1.4	-0.0				
				Wind -Y ecc.+	-3.0	0.5	0.7	0.4	-5.2	-0.2	-5.1	-0.7	16.7	0.6	-3.3	-0.1				
				Wind -Y ecc.-	-0.8	-0.2	-0.1	-0.2	-2.2	0.0	-1.6	0.3	6.6	-0.1	-1.4	0.0				
				Earthquake X Mode 1	5.5	1.3	3.2	1.0	18.6	0.9	12.1	-1.7	-53.5	0.9	12.6	0.9				
				Earthquake X Mode 2	39.8	-22.4	8.2	-16.9	20.5	2.4	47.6	30.2	-53.7	-20.6	12.1	0.3				
				Earthquake X Mode 3	-0.3	0.9	0.7	0.7	2.4	-0.1	0.5	-1.2	-6.7	0.7	1.7	-0.0				
				Earthquake X Mode 4	-1.1	-0.1	-10.7	-0.1	-4.4	-0.1	-1.5	0.1	2.4	-0.1	-3.5	-0.1				
				Earthquake X Mode 5	-7.2	3.2	-10.5	2.3	-4.4	-0.3	-7.8	-3.9	2.4	2.7	-3.1	-0.1				
				Earthquake X Mode 6	-0.1	-0.1	-1.8	-0.0	-0.7	0.0	-0.2	0.1	0.4	-0.0	-0.6	0.0				
				Earthquake X Mode 7	0.2	0.0	2.1	0.0	-0.3	-0.0	0.1	-0.0	3.1	-0.0	-0.3	-0.0				
				Earthquake X Mode 8	0.0	-0.0	1.7	-0.0	-0.3	-0.0	-0.1	0.0	2.5	-0.0	-0.2	-0.0				
				Earthquake X Mode 9	-1.4	-0.1	-3.0	-0.1	0.6	-0.0	-1.2	0.3	-4.7	-0.2	0.5	-0.1				
				Earthquake Y Mode 1	2.5	0.6	1.4	0.5	8.4	0.4	5.5	-0.8	-24.3	0.4	5.7	0.4				
				Earthquake Y Mode 2	12.3	-6.9	2.5	-5.2	6.3	0.7	14.7	9.3	-16.6	-6.4	3.7	0.1				
				Earthquake Y Mode 3	-1.7	5.5	4.1	4.2	14.9	-0.5	3.2	-7.1	-41.2	4.5	10.4	-0.2				
				Earthquake Y Mode 4	-0.2	-0.0	-2.1	-0.0	-0.9	-0.0	-0.3	0.0	0.5	-0.0	-0.7	-0.0				
				Earthquake Y Mode 5	-1.3	0.6	-1.9	0.4	-0.8	-0.1	-1.4	-0.7	0.4	0.5	-0.6	-0.0				
				Earthquake Y Mode 6	-1.0	-0.5	-14.4	-0.4	-6.1	0.0	-1.6	0.6	3.7	-0.3	-4.8	0.0				
				Earthquake Y Mode 7	0.1	0.0	0.6	0.0	-0.1	-0.0	0.0	-0.0	0.9	-0.0	-0.1	-0.0				
				Earthquake Y Mode 8	0.0	-0.0	4.3	-0.0	-0.6	-0.0	-0.2	0.1	6.2	-0.1	-0.5	-0.0				
				Earthquake Y Mode 9	-0.5	-0.0	-1.1	-0.0	0.2	-0.0	-0.4	0.1	-1.7	-0.1	0.2	-0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 3	30.0	6.00/9.00	Self weight	304.5	6.0	-23.4	4.6	-16.4	-0.1	282.5	-7.8	31.5	4.8	-28.2	0.1				
				Dead load	147.6	-0.4	-1.1	-0.2	-1.4	0.1	147.8	0.4	5.4	-0.4	-7.9	0.1				
				Live load	104.5	3.3	-14.5	2.5	-10.3	-0.1	102.4	-4.2	19.5	2.5	-15.7	0.1				
				Wind +X ecc.+	-3.3	1.9	-0.2	1.4	-0.2	-0.1	-3.5	-2.6	0.4	1.7	0.0	0.0				
				Wind +X ecc.-	-2.5	1.7	0.3	1.3	0.8	-0.1	-2.3	-2.3	-2.1	1.5	0.7	0.1				
				Wind -X ecc.+	3.3	-1.9	0.2	-1.4	0.2	0.1	3.5	2.6	-0.4	-1.7	-0.0	-0.0				
				Wind -X ecc.-	2.5	-1.7	-0.3	-1.3	-0.8	0.1	2.3	2.3	2.1	-1.5	-0.7	-0.1				
				Wind +Y ecc.+	5.3	-0.6	4.7	-0.4	7.7	0.3	7.8	0.9	-18.6	-0.7	5.2	0.2				
				Wind +Y ecc.-	1.4	0.3	2.2	0.3	3.1	-0.0	2.4	-0.4	-7.2	0.2	2.1	-0.1				
				Wind -Y ecc.+	-5.3	0.6	-4.7	0.4	-7.7	-0.3	-7.8	-0.9	18.6	0.7	-5.2	-0.2				
				Wind -Y ecc.-	-1.4	-0.3	-2.2	-0.3	-3.1	0.0	-2.4	0.4	7.2	-0.2	-2.1	0.1				
				Earthquake X Mode 1	10.2	1.7	23.0	1.3	25.0	1.1	17.5	-2.1	-52.7	1.1	17.5	1.1				
				Earthquake X Mode 2	62.2	-26.4	25.3	-19.8	25.5	2.8	70.7	35.2	-51.5	-24.1	15.4	0.4				
				Earthquake X Mode 3	-0.2	1.1	3.1	0.8	3.1	-0.1	0.7	-1.4	-6.2	0.9	2.2	-0.0				
				Earthquake X Mode 4	-1.4	-0.0	-9.5	-0.0	-0.8	-0.0	-1.1	0.0	-7.4	0.0	-0.6	-0.0				
				Earthquake X Mode 5	-8.6	0.8	-9.0	0.5	-0.8	-0.1	-8.5	-0.7	-6.8	0.5	-0.4	-0.1				
				Earthquake X Mode 6	-0.2	-0.0	-1.5	-0.0	-0.1	0.0	-0.1	0.0	-1.2	-0.0	-0.1	0.0				
				Earthquake X Mode 7	0.1	0.0	-2.9	0.0	-2.0	-0.0	-0.1	-0.0	3.1	0.0	-1.7	-0.0				
				Earthquake X Mode 8	-0.0	-0.1	-2.4	-0.1	-1.6	0.0	-0.1	0.2	2.5	-0.1	-1.4	-0.0				
				Earthquake X Mode 9	-0.8	-0.9	4.4	-0.6	3.0	0.1	-0.5	1.1	-4.5	-0.8	2.5	-0.0				
				Earthquake Y Mode 1	4.6	0.8	10.4	0.6	11.3	0.5	8.0	-1.0	-23.9	0.5	7.9	0.5				
				Earthquake Y Mode 2	19.2	-8.1	7.8	-6.1	7.9	0.9	21.9	10.9	-15.9	-7.4	4.8	0.1				
				Earthquake Y Mode 3	-1.0	6.7	18.9	5.1	18.8	-0.6	4.3	-8.6	-38.1	5.4	13.5	-0.3				
				Earthquake Y Mode 4	-0.3	-0.0	-1.8	-0.0	-0.1	-0.0	-0.2	0.0	-1.4	0.0	-0.1	-0.0				
				Earthquake Y Mode 5	-1.6	0.2	-1.6	0.1	-0.1	-0.0	-1.6	-0.1	-1.2	0.1	-0.1	-0.0				
				Earthquake Y Mode 6	-1.3	-0.2	-12.7	-0.1	-1.0	0.0	-0.9	0.2	-10.0	-0.1	-0.8	0.0				
				Earthquake Y Mode 7	0.0	0.0	-0.9	0.0	-0.6	-0.0	-0.0	-0.0	0.9	0.0	-0.5	-0.0				
				Earthquake Y Mode 8	-0.0	-0.3	-5.9	-0.3	-4.1	0.0	-0.4	0.4	6.3	-0.3	-3.4	-0.0				
				Earthquake Y Mode 9	-0.3	-0.3	1.6	-0.2	1.1	0.0	-0.2	0.4	-1.6	-0.3	0.9	-0.0				
					Floor 2	30.0	3.00/6.00	Self weight	405.0	5.5	-25.1	4.2	-16.0	-0.0	384.3	-7.0	29.3	4.2	-30.6	0.1
								Dead load	185.8	-0.6	-0.7	-0.4	0.1	0.1	186.4	0.8	1.7	-0.6	-7.6	0.0
								Live load	147.5	3.1	-15.8	2.3	-10.5	-0.0	146.1	-3.9	19.2	2.3	-17.1	0.1
								Wind +X ecc.+	-4.7	2.1	-0.2	1.6	-0.2	-0.1	-4.8	-2.7	0.3	1.9	0.1	0.0
Wind +X ecc.-	-3.4	1.9	1.9					1.4	1.2	-0.1	-3.3	-2.4	-1.8	1.7	1.1	0.1				
Wind -X ecc.+	4.7	-2.1	0.2					-1.6	0.2	0.1	4.8	2.7	-0.3	-1.9	-0.1	-0.0				
Wind -X ecc.-	3.4	-1.9	-1.9					-1.4	-1.2	0.1	3.3	2.4	1.8	-1.7	-1.1	-0.1				
Wind +Y ecc.+	7.9	-0.6	16.3					-0.4	10.7	0.3	10.2	0.8	-15.8	-0.7	7.7	0.2				
Wind +Y ecc.-	2.1	0.5	6.7					0.4	4.2	-0.1	3.0	-0.6	-5.9	0.3	3.1	-0.1				
Wind -Y ecc.+	-7.9	0.6	-16.3					0.4	-10.7	-0.3	-10.2	-0.8	15.8	0.7	-7.7	-0.2				
Wind -Y ecc.-	-2.1	-0.5	-6.7					-0.4	-4.2	0.1	-3.0	0.6	5.9	-0.3	-3.1	0.1				
Earthquake X Mode 1	15.6	1.8	54.8					1.4	30.8	1.2	21.7	-2.1	-37.4	1.1	22.7	1.1				
Earthquake X Mode 2	85.7	-26.5	52.4					-19.5	29.9	2.8	93.2	34.1	-36.6	-23.5	19.0	0.5				
Earthquake X Mode 3	-0.0	1.2	6.9					0.9	3.7	-0.1	0.7	-1.4	-4.2	0.9	2.8	-0.1				
Earthquake X Mode 4	-1.1	0.1	-0.5					0.1	3.6	0.1	-0.4	-0.1	-11.4	0.1	2.9	0.1				
Earthquake X Mode 5	-7.9	-1.8	-0.4					-1.4	3.4	0.1	-7.3	2.6	-10.6	-1.9	2.9	-0.1				
Earthquake X Mode 6	-0.1	0.0	-0.0					0.0	0.6	-0.0	-0.0	-0.1	-1.8	0.0	0.5	0.0				
Earthquake X Mode 7	0.0	-0.0	-2.6					-0.0	-0.1	-0.0	0.1	-0.0	-2.2	0.0	-0.1	-0.0				
Earthquake X Mode 8	-0.0	-0.0	-2.0					-0.0	-0.1	0.0	0.0	0.0	-1.8	-0.0	-0.1	0.0				
Earthquake X Mode 9	-0.4	-0.1	3.7					-0.1	0.1	0.0	-0.5	0.0	3.4	-0.0	0.1	0.0				
Earthquake Y Mode 1	7.1	0.8	24.9					0.6	14.0	0.5	9.9	-1.0	-17.0	0.5	10.3	0.5				
Earthquake Y Mode 2	26.5	-8.2	16.2					-6.0	9.2	0.9	28.8	10.5	-11.3	-7.3	5.9	0.2				
Earthquake Y Mode 3	-0.1	7.1	42.2					5.3	22.7	-0.7	4.1	-8.8	-25.9	5.5	17.1	-0.4				
Earthquake Y Mode 4	-0.2	0.0	-0.1					0.0	0.7	0.0	-0.1	-0.0	-2.2	0.0	0.6	0.0				
Earthquake Y Mode 5	-1.4	-0.3	-0.1					-0.3	0.6	0.0	-1.3	0.5	-1.9	-0.3	0.5	-0.0				
Earthquake Y Mode 6	-1.0	0.3	-0.3					0.2	4.9	-0.0	-0.0	-0.4	-15.2	0.3	3.9	0.0				
Earthquake Y Mode 7	0.0	-0.0	-0.8					-0.0	-0.0	-0.0	0.0	-0.0	-0.7	0.0	-0.0	-0.0				
Earthquake Y Mode 8	-0.1	-0.1	-5.0					-0.0	-0.2	0.0	0.1	0.0	-4.5	-0.0	-0.2	0.0				
Earthquake Y Mode 9	-0.1	-0.0	1.3					-0.0	0.0	0.0	-0.2	0.0	1.2	-0.0	0.0	0.0				
	Floor 1	30.0	0.00/3.00					Self weight	505.5	2.2	-9.2	2.3	-9.3	0.0	485.6	-4.5	25.8	2.0	-27.4	-0.0
								Dead load	225.1	-0.3	1.5	-0.3	0.8	0.1	226.0	0.7	2.3	-0.5	-8.1	0.0
								Live load	190.7	1.2	-6.4	1.3	-6.5	0.0	189.6	-2.5	16.9	1.1	-14.7	-0.0
								Wind +X ecc.+	-5.9	1.6	-0.5	1.1	-0.2	-0.1	-6.1	-1.8	0.2	1.3	0.0	-0.0
				Wind +X ecc.-	-4.3	1.4	7.2	1.0	2.5	-0.1	-4.4	-1.6	-0.1	1.1	2.2	0.0				
				Wind -X ecc.+	5.9	-1.6	0.5	-1.1	0.2	0.1	6.1	1.8	-0.2	-1.3	-0.0	0.0				
				Wind -X ecc.-	4.3	-1.4	-7.2	-1.0	-2.5	0.1	4.4	1.6	0.1	-1.1	-2.2	-0.0				
				Wind +Y ecc.+	10.3	-0.4	56.9	-0.2	20.0	0.2	10.6	0.5	-1.7	-0.5	16.4	0.1				
				Wind +Y ecc.-	2.6	0.5	21.6	0.3	7.4	-0.1	2.7	-0.5	-0.3	0.3	6.2	-0.1				
				Wind -Y ecc.+	-10.3	0.4	-56.9	0.2	-20.0	-0.2	-10.6	-0.5	1.7	0.5	-16.4	-0.1				
				Wind -Y ecc.-	-2.6	-0.5	-21.6	-0.3	-7.4	0.1	-2.7	0.5	0.3	-0.3	-6.2	0.1				
				Earthquake X Mode 1	20.2	1.2	150.1	0.8	49.1	0.8	20.4	-1.1	6.2	0.5	40.7	0.6				
				Earthquake X Mode 2	105.2	-18.0	136.7	-12.4	45.4	2.0	107.1	20.5	3.9	-14.4	34.4	0.9				
				Earthquake X Mode 3	0.0	0.9	17.0	0.6	5.4	-0.1	0.0	-1.0	1.1	0.6	4.5	-0.1				
				Earthquake X Mode 4	-0.6	0.1	18.2	0.1	7.9	0.1	-0.5	-0.1	-5.1	0.0	6.7	0.1				
				Earthquake X Mode 5	-5.9	-2.4	17.2	-1.7	7.4	0.2	-5.7	2.8	-4.8	-2.0	6.4	0.0				
				Earthquake X Mode 6	-0.1	0.1	2.9	0.0	1.2	-0.0	-0.0	-0.1	-0.8	0.0	1.1	-0.0				
				Earthquake X Mode 7	0.1	-0.0	4.6	-0.0	2.7	0.0	0.2	0.0	-3.3	-0.0	2.3	0.0				
				Earthquake X Mode 8	-0.0	0.1	3.6	0.1	2.1	-0.0	0.1	-0.1	-2.5	0.1	1.8	0.0				
				Earthquake X Mode 9	-0.8	0.7	-6.7	0.5	-3.9	-0.0	-1.0	-0.9	4.7	0.6	-3.3	0.0				
				Earthquake Y Mode 1	9.2	0.5	68.1	0.4	22.3	0.4	9.3	-0.5	2.8	0.2	18.5	0.3				
				Earthquake Y Mode 2	32.5	-5.6	42.2	-3.8	14.0	0.6	33.1	6.3	1.2	-4.5	10.6	0.3				
				Earthquake Y Mode 3	0.2	5.3	104.6	3.8	33.3	-0.6	0.1	-5.9	6.9	3.7	27.9	-0.5				
				Earthquake Y Mode 4	-0.1	0.0	3.5	0.0	1.5	0.0	-0.1	-0.0	-1.0	0.0	1.3	0.0				
				Earthquake Y Mode 5	-1.1	-0.4	3.1	-0.3	1.4	0.0	-1.0	0.5	-0.9	-0.4	1.2	0.0				
				Earthquake Y Mode 6	-0.5	0.5	23.8	0.3	10.3	-0.0	-0.3	-0.5	-6.5	0.3	8.6	-0.0				
				Earthquake Y Mode 7	0.0	-0.0	1.4	-0.0	0.8	0.0	0.1	0.0	-1.0	-0.0	0.7	0.0				
				Earthquake Y Mode 8	-0.0	0.3	9.0	0.2	5.2	-0.0	0.2	-0.3	-6.4	0.2	4.4	0.0				
				Earthquake Y Mode 9	-0.3	0.2	-2.5	0.2	-1.4	-0.0	-0.4	-0.3	1.7	0.2	-1.2	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
	Floor 2	30.0	3.00/6.00	Self weight	337.2	33.2	3.4	23.7	2.5	-0.7	310.1	-44.8	-4.3	33.1	3.1	-0.3			
				Dead load	134.6	6.1	-0.9	3.9	-0.7	0.2	133.3	-7.4	1.3	7.0	-0.9	0.1			
				Live load	107.8	19.4	2.1	14.3	1.5	-0.4	104.5	-26.7	-2.7	17.9	2.0	-0.2			
				Wind +X ecc.+	-16.3	8.9	-0.3	6.2	-0.2	-0.1	-17.1	-9.3	0.3	3.9	-0.0	-0.0			
				Wind +X ecc.-	-13.8	8.1	0.6	5.6	0.4	-0.1	-14.6	-8.4	-0.9	3.7	0.7	-0.0			
				Wind -X ecc.+	16.3	-8.9	0.3	-6.2	0.2	0.1	17.1	9.3	-0.3	-3.9	0.0	0.0			
				Wind -X ecc.-	13.8	-8.1	-0.6	-5.6	-0.4	0.1	14.6	8.4	0.9	-3.7	-0.7	0.0			
				Wind +Y ecc.+	17.1	-5.0	6.7	-3.8	4.9	-0.7	17.1	5.5	-8.5	-1.6	5.9	-0.2			
				Wind +Y ecc.-	5.8	-1.4	2.6	-1.0	1.9	-0.4	5.8	1.4	-3.3	-0.4	2.3	-0.2			
				Wind -Y ecc.+	-17.1	5.0	-6.7	3.8	-4.9	0.7	-17.1	-5.5	8.5	1.6	-5.9	0.2			
				Wind -Y ecc.-	-5.8	1.4	-2.6	1.0	-1.9	0.4	-5.8	-1.4	3.3	0.4	-2.3	0.2			
				Earthquake X Mode 1	9.3	11.5	19.1	5.0	13.8	-1.8	7.0	-5.0	-24.2	5.7	17.2	-0.0			
				Earthquake X Mode 2	258.3	-122.7	20.2	-78.5	14.9	-0.7	267.5	104.9	-24.8	-46.3	15.7	0.0			
				Earthquake X Mode 3	-1.2	2.3	2.2	1.2	1.6	-0.4	-1.6	-1.5	-2.8	1.0	2.0	-0.2			
				Earthquake X Mode 4	-1.2	-0.7	1.1	0.8	0.9	-0.1	-1.2	-3.2	-1.7	0.7	1.1	0.1			
				Earthquake X Mode 5	-23.2	-4.6	1.4	-10.0	1.1	0.0	-22.9	24.9	-1.9	-8.3	1.2	0.1			
				Earthquake X Mode 6	-0.4	-0.1	0.2	0.0	0.1	-0.0	-0.4	-0.3	-0.3	0.0	0.2	-0.0			
				Earthquake X Mode 7	0.0	-0.8	-0.1	-0.0	-0.0	0.0	0.1	-0.7	0.0	-0.1	-0.0	0.0			
				Earthquake X Mode 8	0.1	-1.0	-0.0	-0.0	-0.0	0.0	0.2	-0.8	0.0	-0.0	-0.0	0.0			
				Earthquake X Mode 9	-0.0	-5.1	0.1	-0.4	0.0	-0.0	0.3	-4.0	-0.0	0.1	0.0	-0.0			
				Earthquake Y Mode 1	4.2	5.2	8.6	2.3	6.3	-0.8	3.2	-2.3	-11.0	2.6	7.8	-0.0			
				Earthquake Y Mode 2	79.8	-37.9	6.3	-24.2	4.6	-0.2	82.6	32.4	-7.6	-14.3	4.8	0.0			
				Earthquake Y Mode 3	-7.5	14.3	13.8	7.6	10.0	-2.5	-9.6	-9.0	-17.4	6.2	12.2	-1.4			
				Earthquake Y Mode 4	-0.2	-0.1	0.2	0.2	0.2	-0.0	-0.2	-0.6	-0.3	0.1	0.2	0.0			
				Earthquake Y Mode 5	-4.2	-0.8	0.3	-1.8	0.2	0.0	-4.2	4.5	-0.3	-1.5	0.2	0.0			
				Earthquake Y Mode 6	-2.9	-1.1	1.5	0.3	1.2	-0.2	-3.0	-2.1	-2.2	0.3	1.5	-0.0			
				Earthquake Y Mode 7	0.0	-0.3	-0.0	-0.0	-0.0	0.0	0.0	-0.2	0.0	-0.0	-0.0	0.0			
				Earthquake Y Mode 8	0.3	-2.4	-0.1	-0.1	-0.0	0.0	0.4	-2.0	0.0	-0.1	-0.1	0.0			
				Earthquake Y Mode 9	-0.0	-1.9	0.0	-0.1	0.0	-0.0	0.1	-1.5	-0.0	0.0	0.0	-0.0			
				Floor 1	30.0	0.00/3.00	Self weight	431.7	15.7	1.6	13.9	1.6	-0.5	404.2	-34.6	-3.7	27.1	2.2	-0.2
							Dead load	162.7	2.1	-0.3	1.9	-0.4	0.1	161.3	-5.9	0.9	6.0	-0.6	0.0
							Live load	146.4	9.5	1.0	8.7	1.0	-0.3	143.0	-20.8	-2.3	14.3	1.4	-0.1
							Wind +X ecc.+	-23.9	23.2	-0.1	9.3	-0.1	-0.1	-24.3	-3.9	0.2	6.7	0.0	0.0
	Wind +X ecc.-	-20.1	22.4				0.6	8.8	0.3	-0.1	-20.6	-3.2	-0.6	6.5	0.6	0.0			
	Wind -X ecc.+	23.9	-23.2				0.1	-9.3	0.1	0.1	24.3	3.9	-0.2	-6.7	-0.0	-0.0			
	Wind -X ecc.-	20.1	-22.4				-0.6	-8.8	-0.3	0.1	20.6	3.2	0.6	-6.5	-0.6	-0.0			
	Wind +Y ecc.+	24.9	-3.2				5.2	-2.9	3.5	-0.5	24.9	4.5	-5.7	-0.6	4.2	-0.1			
	Wind +Y ecc.-	8.0	0.6				2.0	-0.2	1.3	-0.3	7.9	1.1	-2.1	0.4	1.5	-0.2			
	Wind -Y ecc.+	-24.9	3.2				-5.2	2.9	-3.5	0.5	-24.9	-4.5	5.7	0.6	-4.2	0.1			
	Wind -Y ecc.-	-8.0	-0.6				-2.0	0.2	-1.3	0.3	-7.9	-1.1	2.1	-0.4	-1.5	0.2			
	Earthquake X Mode 1	13.5	45.3				13.7	12.4	9.0	-1.0	12.3	7.4	-14.7	12.7	11.4	0.1			
	Earthquake X Mode 2	355.6	-240.8				13.5	-95.0	9.4	-0.3	361.0	33.9	-14.8	-61.7	9.5	-0.2			
	Earthquake X Mode 3	-1.8	7.6				1.5	2.4	1.0	-0.3	-2.0	0.3	-1.6	2.1	1.2	-0.1			
	Earthquake X Mode 4	-0.7	5.4				1.6	2.1	1.1	-0.1	-0.8	-1.0	-1.8	2.0	1.3	0.1			
	Earthquake X Mode 5	-9.4	-34.9				1.6	-17.2	1.2	0.0	-8.7	15.6	-1.9	-13.5	1.2	0.0			
Earthquake X Mode 6	-0.2	0.5	0.2				0.2	0.2	-0.0	-0.2	-0.0	-0.3	0.2	0.2	-0.0				
Earthquake X Mode 7	0.1	1.3	0.4				0.7	0.3	0.0	0.1	-0.8	-0.5	0.7	0.3	0.0				
Earthquake X Mode 8	0.0	1.7	0.3				1.0	0.2	-0.0	0.0	-1.2	-0.3	0.9	0.3	0.0				
Earthquake X Mode 9	-2.5	10.7	-0.6				6.6	-0.4	-0.0	-2.3	-8.7	0.7	5.5	-0.5	-0.0				
Earthquake Y Mode 1	6.1	20.6	6.2				5.6	4.1	-0.5	5.6	3.3	-6.7	5.8	5.2	0.0				
Earthquake Y Mode 2	109.8	-74.4	4.2				-29.4	2.9	-0.1	111.5	10.5	-4.6	-19.1	2.9	-0.1				
Earthquake Y Mode 3	-11.2	46.6	9.5				15.0	6.3	-1.6	-12.3	1.7	-10.1	13.0	7.7	-0.9				
Earthquake Y Mode 4	-0.1	1.0	0.3				0.4	0.2	-0.0	-0.2	-0.2	-0.3	0.4	0.3	0.0				
Earthquake Y Mode 5	-1.7	-6.3	0.3				-3.1	0.2	0.0	-1.6	2.8	-0.3	-2.5	0.2	0.0				
Earthquake Y Mode 6	-1.7	4.3	2.0				1.5	1.4	-0.2	-1.7	-0.2	-2.3	1.5	1.7	-0.0				
Earthquake Y Mode 7	0.0	0.4	0.1				0.2	0.1	0.0	0.0	-0.2	-0.1	0.2	0.1	0.0				
Earthquake Y Mode 8	0.1	4.1	0.7				2.4	0.5	-0.0	0.1	-2.9	-0.9	2.1	0.6	0.0				
Earthquake Y Mode 9	-0.9	3.9	-0.2				2.4	-0.2	-0.0	-0.9	-3.2	0.3	2.0	-0.2	-0.0				
W14	Floor 6	30.0	15.00/17.30				Self weight	36.5	-0.1	3.9	0.1	5.2	0.0	21.3	0.3	-8.6	-0.6	6.6	-0.7
							Dead load	1.9	0.7	6.0	0.9	3.8	0.2	1.9	-1.4	-2.8	0.6	4.0	0.1
							Live load	4.0	-1.3	0.5	-0.3	0.8	-0.0	3.9	-0.5	-1.3	-0.5	0.9	-0.1
				Wind +X ecc.+	1.4	-0.4	0.1	0.6	0.0	-0.0	1.5	-1.8	0.1	0.3	-0.0	-0.0			
				Wind +X ecc.-	1.3	-0.7	0.2	0.4	0.2	-0.0	1.4	-1.5	-0.2	0.1	0.2	0.0			
				Wind -X ecc.+	-1.4	0.4	-0.1	-0.6	-0.0	0.0	-1.5	1.8	-0.1	-0.3	0.0	0.0			
				Wind -X ecc.-	-1.3	0.7	-0.2	-0.4	-0.2	0.0	-1.4	1.5	0.2	-0.1	-0.2	-0.0			
				Wind +Y ecc.+	0.7	-0.3	1.6	-0.3	1.6	0.2	0.6	0.4	-2.3	-0.3	2.0	-0.0			
				Wind +Y ecc.-	0.4	-0.6	0.8	-0.4	0.8	0.1	0.4	0.2	-1.1	-0.4	1.0	-0.0			
				Wind -Y ecc.+	-0.7	0.3	-1.6	0.3	-1.6	-0.2	-0.6	-0.4	2.3	0.3	-2.0	0.0			
				Wind -Y ecc.-	-0.4	0.6	-0.8	0.4	-0.8	-0.1	-0.4	-0.2	1.1	0.4	-1.0	0.0			
				Earthquake X Mode 1	6.7	-1.7	5.0	1.3	5.2	0.5	7.0	-4.4	-7.3	0.2	6.1	-0.0			
				Earthquake X Mode 2	-11.4	26.4	3.4	3.4	4.3	0.9	-13.7	18.7	-7.3	5.8	5.9	0.1			
				Earthquake X Mode 3	0.8	-0.7	0.5	0.0	0.5	-0.0	0.9	-0.7	-0.7	-0.1	0.6	-0.1			
				Earthquake X Mode 4	-1.9	0.9	-1.3	-0.2	-1.3	-0.1	-2.0	1.4	1.8	0.1	-1.5	-0.0			
				Earthquake X Mode 5	4.5	-5.5	-0.9	0.5	-1.0	-0.3	5.1	-6.5	1.6	-0.5	-1.4	-0.1			
				Earthquake X Mode 6	-0.2	0.1	-0.2	0.0	-0.2	-0.0	-0.2	0.1	0.2	0.0	-0.2	0.0			
				Earthquake X Mode 7	0.5	-0.3	0.4	0.0	0.4	0.1	0.5	-0.3	-0.5	-0.1	0.5	0.0			
				Earthquake X Mode 8	0.5	-0.4	0.3	-0.0	0.3	0.0	0.5	-0.4	-0.4	-0.1	0.4	0.0			
				Earthquake X Mode 9	1.9	0.5	-0.5	1.5	-0.5	-0.1	2.1	-2.8	0.8	0.9	-0.7	-0.0			
				Earthquake Y Mode 1	3.0	-0.8	2.3	0.6	2.4	0.2	3.2	-2.0	-3.3	0.1	2.8	-0.0			
				Earthquake Y Mode 2	-3.5	8.2	1.1	1.1	1.3	0.3	-4.2	5.8	-2.3	1.8	1.8	0.0			
Earthquake Y Mode 3	4.9	-4.3	2.9	0.0	2.9	-0.1	5.3	-4.2	-4.1	-0.8	3.4	-0.1							
Earthquake Y Mode 4	-0.4	0.2	-0.2	-0.0	-0.2	-0.0	-0.4	0.3	0.3	0.0	-0.3	-0.0							
Earthquake Y Mode 5	0.8	-1.0	-0.2	0.1	-0.2	-0.0	0.9	-1.2	0.3	-0.1	-0.3	-0.0							
Earthquake Y Mode 6	-1.7	1.1	-1.4	0.0	-1.4	-0.1	-1.8	1.1	2.0	0.3	-1.7	0.0							
Earthquake Y Mode 7	0.2	-0.1	0.1	0.0	0.1	0.0	0.2	-0.1	-0.2	-0.0	0.1	0.0							
Earthquake Y Mode 8	1.2	-1.0	0.8	-0.0	0.8	0.1	1.3	-0.9	-1.0	-0.2	0.9	0.0							
Earthquake Y Mode 9	0.7	0.2	-0.2	0.5	-0.2	-0.0	0.8	-1.0	0.3	0.3	-0.3	0.0							



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	techo	30.0	12.00/15.00	Self weight	92.6	-23.3	0.8	-15.7	0.7	0.2	78.2	35.6	-1.3	-20.8	0.8	0.2				
				Dead load	29.8	-3.8	3.0	-0.0	3.2	0.2	32.5	0.2	-7.9	-2.0	4.4	-0.1				
				Live load	9.3	-6.3	-0.0	-2.8	-0.0	0.0	9.3	5.3	0.3	-4.0	-0.2	0.0				
				Wind +X ecc.+	2.8	-0.5	0.1	0.7	0.1	-0.0	3.0	-3.1	-0.1	0.2	0.0	0.0				
				Wind +X ecc.-	2.6	-0.3	0.4	0.9	0.2	0.0	2.9	-3.5	-0.6	0.4	0.4	0.0				
				Wind -X ecc.+	-2.8	0.5	-0.1	-0.7	-0.1	0.0	-3.0	3.1	0.1	-0.2	-0.0	-0.0				
				Wind -X ecc.-	-2.6	0.3	-0.4	-0.9	-0.2	-0.0	-2.9	3.5	0.6	-0.4	-0.4	-0.0				
				Wind +Y ecc.+	0.3	1.4	2.1	0.9	1.3	0.3	0.7	-1.7	-3.5	0.7	2.4	0.2				
				Wind +Y ecc.-	0.4	0.6	0.7	0.6	0.5	0.1	0.6	-1.4	-1.2	0.5	0.8	0.0				
				Wind -Y ecc.+	-0.3	-1.4	-2.1	-0.9	-1.3	-0.3	-0.7	1.7	3.5	-0.7	-2.4	-0.2				
				Wind -Y ecc.-	-0.4	-0.6	-0.7	-0.6	-0.5	-0.1	-0.6	1.4	1.2	-0.5	-0.8	-0.0				
				Earthquake X Mode 1	10.3	4.1	8.2	5.5	5.3	1.2	12.5	-15.7	-14.0	3.4	9.3	0.8				
				Earthquake X Mode 2	-31.7	0.6	6.1	-16.7	4.0	1.1	-33.8	59.1	-10.8	-10.1	7.7	0.6				
				Earthquake X Mode 3	1.4	0.7	0.8	1.0	0.5	0.0	1.7	-2.7	-1.3	0.6	0.9	-0.0				
				Earthquake X Mode 4	-3.4	-2.8	-1.8	-2.3	-1.1	-0.2	-4.5	4.6	2.7	-1.5	-1.8	-0.2				
				Earthquake X Mode 5	7.9	8.4	-1.3	7.3	-0.8	-0.2	10.8	-14.8	2.1	5.1	-1.6	-0.1				
				Earthquake X Mode 6	-0.4	-0.4	-0.2	-0.3	-0.1	-0.0	-0.5	0.6	0.3	-0.2	-0.2	-0.0				
				Earthquake X Mode 7	0.9	1.2	0.4	0.8	0.3	0.1	1.3	-1.2	-0.5	0.5	0.4	0.0				
				Earthquake X Mode 8	0.8	1.3	0.3	0.8	0.2	0.0	1.2	-1.3	-0.3	0.6	0.2	0.0				
				Earthquake X Mode 9	1.7	5.9	-0.5	2.7	-0.3	-0.1	3.5	-2.2	0.6	2.1	-0.5	-0.0				
				Earthquake Y Mode 1	4.7	1.9	3.7	2.5	2.4	0.6	5.7	-7.1	-6.3	1.5	4.2	0.4				
				Earthquake Y Mode 2	-9.8	0.2	1.9	-5.2	1.2	0.3	-10.5	18.3	-3.3	-3.1	2.4	0.2				
				Earthquake Y Mode 3	8.5	4.1	4.7	5.9	3.0	0.2	10.3	-16.5	-8.0	3.8	5.4	-0.1				
				Earthquake Y Mode 4	-0.7	-0.5	-0.3	-0.4	-0.2	-0.0	-0.9	0.9	0.5	-0.3	-0.4	-0.0				
				Earthquake Y Mode 5	1.4	1.5	-0.2	1.3	-0.1	-0.0	2.0	-2.7	0.4	0.9	-0.3	-0.0				
				Earthquake Y Mode 6	-3.2	-3.0	-1.8	-2.4	-1.1	-0.1	-4.2	4.9	2.8	-1.6	-1.9	-0.0				
				Earthquake Y Mode 7	0.3	0.3	0.1	0.2	0.1	0.0	0.4	-0.4	-0.2	0.2	0.1	0.0				
				Earthquake Y Mode 8	1.9	3.3	0.7	2.1	0.4	0.0	2.9	-3.1	-0.8	1.5	0.6	0.0				
				Earthquake Y Mode 9	0.6	2.2	-0.2	1.0	-0.1	-0.0	1.3	-0.8	0.2	0.8	-0.2	-0.0				
					Floor 4	30.0	9.00/12.00	Self weight	144.5	-21.3	0.8	-11.6	0.7	0.2	121.8	25.9	-1.2	-12.1	1.3	0.2
								Dead load	48.4	-6.9	0.6	-3.6	0.2	0.2	47.6	10.0	-0.0	-4.9	0.4	-0.0
								Live load	23.2	-7.7	0.2	-4.6	0.2	0.0	21.5	10.8	-0.4	-4.3	0.5	0.1
								Wind +X ecc.+	5.1	0.2	0.1	1.5	0.0	0.0	5.9	-5.7	-0.1	0.6	0.0	-0.0
Wind +X ecc.-	5.1	0.5	0.5					1.6	0.3	0.1	6.0	-6.0	-0.7	0.7	0.3	-0.1				
Wind -X ecc.+	-5.1	-0.2	-0.1					-1.5	-0.0	-0.0	-5.9	5.7	0.1	-0.6	-0.0	0.0				
Wind -X ecc.-	-5.1	-0.5	-0.5					-1.6	-0.3	-0.1	-6.0	6.0	0.7	-0.7	-0.3	0.1				
Wind +Y ecc.+	1.8	2.0	3.2					1.2	2.1	0.3	2.4	-2.5	-4.0	0.6	2.1	-0.7				
Wind +Y ecc.-	1.2	0.7	1.1					0.5	0.7	0.0	1.4	-1.2	-1.4	0.2	0.7	-0.3				
Wind -Y ecc.+	-1.8	-2.0	-3.2					-1.2	-2.1	-0.3	-2.4	2.5	4.0	-0.6	-2.1	0.7				
Wind -Y ecc.-	-1.2	-0.7	-1.1					-0.5	-0.7	-0.0	-1.4	1.2	1.4	-0.2	-0.7	0.3				
Earthquake X Mode 1	23.3	9.4	12.3					9.4	8.0	1.5	27.9	-26.7	-14.9	4.3	7.7	-2.5				
Earthquake X Mode 2	-60.1	-6.3	9.5					-17.2	6.3	1.2	-68.9	62.4	-11.7	-6.2	6.3	-1.8				
Earthquake X Mode 3	3.2	1.2	1.2					1.3	0.8	0.0	3.8	-3.6	-1.4	0.5	0.7	-0.4				
Earthquake X Mode 4	-6.3	-3.5	-1.8					-1.8	-1.1	-0.2	-6.9	2.8	1.7	-0.6	-0.9	0.4				
Earthquake X Mode 5	11.7	13.8	-1.4					5.2	-0.9	-0.1	13.8	-3.1	1.3	2.2	-0.8	0.3				
Earthquake X Mode 6	-0.8	-0.4	-0.2					-0.2	-0.1	-0.0	-0.8	0.3	0.2	-0.1	-0.1	0.1				
Earthquake X Mode 7	1.4	0.3	-0.0					-0.1	-0.0	0.0	1.2	0.6	0.1	-0.3	-0.1	-0.0				
Earthquake X Mode 8	1.2	0.4	0.0					-0.2	-0.0	0.0	1.0	0.9	0.1	-0.3	-0.1	-0.0				
Earthquake X Mode 9	2.3	2.9	0.0					-0.7	0.0	0.0	1.5	5.3	-0.2	-1.1	0.1	0.0				
Earthquake Y Mode 1	10.6	4.2	5.6					4.3	3.6	0.7	12.7	-12.1	-6.8	1.9	3.5	-1.1				
Earthquake Y Mode 2	-18.6	-2.0	2.9					-5.3	1.9	0.4	-21.3	19.3	-3.6	-1.9	1.9	-0.6				
Earthquake Y Mode 3	19.9	7.6	7.1					7.7	4.6	0.2	23.6	-22.0	-8.6	3.4	4.4	-2.2				
Earthquake Y Mode 4	-1.2	-0.7	-0.3					-0.4	-0.2	-0.0	-1.3	0.5	0.3	-0.1	-0.2	0.1				
Earthquake Y Mode 5	2.1	2.5	-0.3					0.9	-0.2	-0.0	2.5	-0.6	0.2	0.4	-0.1	0.0				
Earthquake Y Mode 6	-6.2	-3.1	-1.9					-1.7	-1.2	-0.1	-6.8	2.8	1.8	-0.5	-1.0	0.5				
Earthquake Y Mode 7	0.4	0.1	-0.0					-0.0	-0.0	0.0	0.4	0.2	0.0	-0.1	-0.0	-0.0				
Earthquake Y Mode 8	3.0	0.9	0.0					-0.4	-0.0	0.0	2.5	2.1	0.2	-0.8	-0.1	-0.0				
Earthquake Y Mode 9	0.8	1.1	0.0					-0.3	0.0	0.0	0.6	1.9	-0.1	-0.4	0.0	0.0				
	Floor 3	30.0	6.00/9.00					Self weight	198.3	-22.1	1.0	-12.2	0.8	0.2	175.3	26.0	-1.5	-15.0	1.4	0.1
								Dead load	66.1	-6.5	0.9	-2.7	0.7	0.1	65.9	7.5	-1.2	-4.4	1.0	0.0
								Live load	37.2	-7.6	0.3	-4.3	0.2	0.1	35.7	10.0	-0.5	-4.4	0.5	0.1
								Wind +X ecc.+	8.6	2.4	0.1	2.7	0.1	0.0	9.9	-7.6	-0.1	1.1	0.0	-0.0
				Wind +X ecc.-	9.0	2.7	0.7	2.9	0.4	0.1	10.4	-8.0	-0.8	1.2	0.4	-0.2				
				Wind -X ecc.+	-8.6	-2.4	-0.1	-2.7	-0.1	-0.0	-9.9	7.6	0.1	-1.1	-0.0	0.0				
				Wind -X ecc.-	-9.0	-2.7	-0.7	-2.9	-0.4	-0.1	-10.4	8.0	0.8	-1.2	-0.4	0.2				
				Wind +Y ecc.+	4.6	2.5	4.2	1.7	2.7	0.4	5.3	-3.7	-4.9	0.7	2.6	-1.0				
				Wind +Y ecc.-	2.4	1.0	1.4	0.8	0.9	0.0	2.8	-1.9	-1.6	0.3	0.8	-0.4				
				Wind -Y ecc.+	-4.6	-2.5	-4.2	-1.7	-2.7	-0.4	-5.3	3.7	4.9	-0.7	-2.6	1.0				
				Wind -Y ecc.-	-2.4	-1.0	-1.4	-0.8	-0.9	-0.0	-2.8	1.9	1.6	-0.3	-0.8	0.4				
				Earthquake X Mode 1	43.4	17.2	15.1	13.7	9.7	1.8	49.5	-33.3	-17.2	5.6	9.0	-3.2				
				Earthquake X Mode 2	-96.3	-32.5	11.7	-29.7	7.5	1.4	-110.6	76.6	-13.4	-12.4	7.2	-2.3				
				Earthquake X Mode 3	5.9	2.3	1.4	1.8	0.9	0.0	6.7	-4.4	-1.5	0.7	0.8	-0.4				
				Earthquake X Mode 4	-7.9	-2.1	-0.6	-0.4	-0.3	-0.1	-7.8	-0.8	0.1	0.5	-0.1	0.2				
				Earthquake X Mode 5	14.1	11.2	-0.4	0.9	-0.2	-0.0	13.4	9.1	-0.1	-1.2	-0.0	0.1				
				Earthquake X Mode 6	-1.0	-0.2	-0.1	-0.0	-0.0	-0.0	-0.9	-0.0	0.0	0.1	-0.0	0.0				
				Earthquake X Mode 7	1.0	-1.0	-0.4	-0.7	-0.3	-0.0	0.7	1.2	0.5	-0.6	-0.3	0.1				
				Earthquake X Mode 8	1.0	-1.1	-0.3	-0.7	-0.2	-0.0	0.5	1.3	0.3	-0.6	-0.2	0.1				
				Earthquake X Mode 9	2.7	-5.2	0.5	-3.5	0.4	0.0	0.7	5.5	-0.6	-2.9	0.4	-0.1				
				Earthquake Y Mode 1	19.7	7.8	6.9	6.2	4.4	0.8	22.5	-15.1	-7.8	2.5	4.1	-1.4				
				Earthquake Y Mode 2	-29.8	-10.0	3.6	-9.2	2.3	0.4	-34.2	23.7	-4.1	-3.8	2.2	-0.7				
				Earthquake Y Mode 3	36.2	14.0	8.4	11.2	5.4	0.2	41.2	-27.3	-9.5	4.5	5.0	-2.7				
				Earthquake Y Mode 4	-1.5	-0.4	-0.1	-0.1	-0.1	-0.0	-1.5	-0.1	0.0	0.1	-0.0	0.0				
				Earthquake Y Mode 5	2.6	2.0	-0.1	0.2	-0.0	-0.0	2.4	1.7	-0.0	-0.2	-0.0	0.0				
				Earthquake Y Mode 6	-7.9	-1.6	-0.6	-0.3	-0.3	-0.0	-7.7	-0.4	0.0	0.5	-0.1	0.2				
				Earthquake Y Mode 7	0.3	-0.3	-0.1	-0.2	-0.1	-0.0	0.2	0.4	0.1	-0.2	-0.1	0.0				
				Earthquake Y Mode 8	2.4	-2.7	-0.7	-1.9	-0.5	-0.0	1.4	3.1	0.8	-1.5	-0.4	0.1				
				Earthquake Y Mode 9	1.0	-1.9	0.2	-1.3	0.1	0.0	0.2	2.0	-0.2	-1.1	0.1	-0.1				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head						
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	
	Floor 2	30.0	3.00/6.00	Self weight	254.9	-23.2	1.4	-12.1	1.0	0.2	231.8	24.2	-1.9	-17.3	1.7	0.0	
				Dead load	84.4	-7.9	0.8	-3.4	0.5	0.1	83.7	8.4	-0.9	-5.8	0.9	0.0	
				Live load	51.8	-8.0	0.5	-4.4	0.4	0.1	50.2	9.8	-0.7	-5.1	0.7	0.0	
				Wind +X ecc.+	13.1	5.5	0.1	3.7	0.1	0.0	14.7	-7.5	-0.1	1.4	0.0	-0.0	
				Wind +X ecc.-	14.0	5.8	0.8	4.0	0.5	0.1	15.7	-8.0	-0.9	1.5	0.4	-0.2	
				Wind -X ecc.+	-13.1	-5.5	-0.1	-3.7	-0.1	-0.0	-14.7	7.5	0.1	-1.4	-0.0	0.0	
				Wind -X ecc.-	-14.0	-5.8	-0.8	-4.0	-0.5	-0.1	-15.7	8.0	0.9	-1.5	-0.4	0.2	
				Wind +Y ecc.+	8.8	2.7	5.0	2.0	3.2	0.4	9.5	-4.7	-5.2	0.7	2.8	-1.2	
				Wind +Y ecc.-	4.2	1.2	1.6	0.9	1.0	0.0	4.5	-2.2	-1.6	0.3	0.9	-0.5	
				Wind -Y ecc.+	-8.8	-2.7	-5.0	-2.0	-3.2	-0.4	-9.5	4.7	5.2	-0.7	-2.8	1.2	
				Wind -Y ecc.-	-4.2	-1.2	-1.6	-0.9	-1.0	-0.0	-4.5	2.2	1.6	-0.3	-0.9	0.5	
				Earthquake X Mode 1	69.1	24.5	16.4	16.1	10.4	1.8	75.4	-32.6	-16.9	5.1	9.1	-3.5	
				Earthquake X Mode 2	-137.1	-63.2	12.8	-36.4	8.1	1.4	-152.3	61.6	-13.1	-12.6	7.4	-2.6	
				Earthquake X Mode 3	9.1	3.2	1.4	2.1	0.9	0.0	10.0	-4.2	-1.4	0.6	0.8	-0.5	
				Earthquake X Mode 4	-7.3	1.2	1.0	1.6	0.7	0.1	-6.3	-4.0	-1.4	1.6	0.8	-0.1	
				Earthquake X Mode 5	14.0	-0.9	0.8	-5.3	0.6	0.1	10.3	16.3	-1.3	-5.0	0.7	-0.1	
				Earthquake X Mode 6	-0.9	0.2	0.1	0.2	0.1	0.0	-0.8	-0.4	-0.2	0.2	0.1	-0.0	
				Earthquake X Mode 7	0.5	-0.6	-0.1	-0.1	-0.0	-0.0	0.5	-0.2	-0.0	0.0	0.0	0.0	
				Earthquake X Mode 8	0.5	-0.7	-0.0	-0.1	-0.0	-0.0	0.5	-0.3	-0.0	0.0	0.0	0.0	
				Earthquake X Mode 9	1.7	-4.3	0.1	-0.4	0.0	0.0	1.8	-3.1	0.1	0.1	-0.0	-0.0	
				Earthquake Y Mode 1	31.3	11.1	7.5	7.3	4.7	0.8	34.2	-14.8	-7.7	2.3	4.1	-1.6	
				Earthquake Y Mode 2	-42.3	-19.5	4.0	-11.2	2.5	0.4	-47.0	19.0	-4.0	-3.9	2.3	-0.8	
				Earthquake Y Mode 3	56.3	19.7	8.7	12.8	5.5	0.1	61.3	-25.8	-8.8	4.0	4.7	-2.9	
				Earthquake Y Mode 4	-1.4	0.2	0.2	0.3	0.1	0.0	-1.2	-0.8	-0.3	0.3	0.1	-0.0	
				Earthquake Y Mode 5	2.5	-0.2	0.2	-1.0	0.1	0.0	1.9	3.0	-0.2	-0.9	0.1	-0.0	
				Earthquake Y Mode 6	-7.2	1.4	1.0	1.5	0.7	0.0	-6.3	-3.6	-1.5	1.5	0.8	-0.2	
				Earthquake Y Mode 7	0.1	-0.2	-0.0	-0.0	-0.0	-0.0	0.2	-0.1	-0.0	0.0	0.0	0.0	
				Earthquake Y Mode 8	1.1	-1.7	-0.1	-0.3	-0.1	-0.0	1.2	-0.9	-0.1	0.1	0.0	0.1	
				Earthquake Y Mode 9	0.6	-1.6	0.0	-0.1	0.0	0.0	0.7	-1.1	0.0	0.0	-0.0	-0.0	
		Floor 1	30.0	0.00/3.00	Self weight	349.9	-5.7	0.8	-7.2	0.8	0.2	293.0	18.5	-1.6	-14.8	1.3	-0.0
					Dead load	114.3	-2.2	0.4	-2.4	0.4	0.1	102.3	7.2	-0.7	-4.6	0.7	0.0
					Live load	74.3	-2.3	0.3	-3.0	0.4	0.1	65.9	8.0	-0.7	-3.9	0.5	-0.0
					Wind +X ecc.+	21.7	18.3	0.0	7.2	0.0	0.0	18.5	-3.9	-0.0	4.4	-0.0	-0.0
					Wind +X ecc.-	23.5	18.1	0.8	7.3	0.5	0.1	20.2	-4.4	-0.5	4.4	0.3	-0.2
					Wind -X ecc.+	-21.7	-18.3	-0.0	-7.2	-0.0	-0.0	-18.5	3.9	0.0	-4.4	0.0	0.0
					Wind -X ecc.-	-23.5	-18.1	-0.8	-7.3	-0.5	-0.1	-20.2	4.4	0.5	-4.4	-0.3	0.2
					Wind +Y ecc.+	15.9	1.1	4.8	1.8	3.1	0.4	14.5	-4.8	-3.1	0.2	1.9	-1.0
					Wind +Y ecc.-	7.2	1.8	1.4	1.2	0.9	0.0	6.5	-2.1	-0.8	0.5	0.5	-0.4
					Wind -Y ecc.+	-15.9	-1.1	-4.8	-1.8	-3.1	-0.4	-14.5	4.8	3.1	-0.2	-1.9	1.0
					Wind -Y ecc.-	-7.2	-1.8	-1.4	-1.2	-0.9	-0.0	-6.5	2.1	0.8	-0.5	-0.5	0.4
					Earthquake X Mode 1	113.5	45.8	14.5	20.8	9.4	1.5	99.3	-20.3	-9.2	9.2	5.4	-2.8
					Earthquake X Mode 2	-216.3	-180.1	11.8	-63.2	7.4	1.1	-180.5	16.3	-7.0	-37.8	4.6	-2.1
					Earthquake X Mode 3	14.7	7.0	1.1	3.0	0.7	0.0	12.8	-2.5	-0.7	1.5	0.4	-0.3
					Earthquake X Mode 4	-4.6	5.5	1.7	3.0	1.1	0.2	-4.0	-3.5	-1.3	2.4	0.8	-0.3
					Earthquake X Mode 5	9.8	-26.4	1.5	-12.0	1.0	0.1	8.3	9.5	-1.1	-10.0	0.7	-0.2
Earthquake X Mode 6					-0.5	0.6	0.2	0.3	0.1	0.0	-0.5	-0.4	-0.2	0.3	0.1	-0.0	
Earthquake X Mode 7					0.8	1.3	0.4	0.8	0.3	0.0	0.9	-1.1	-0.4	0.7	0.2	-0.0	
Earthquake X Mode 8					0.7	1.5	0.3	0.9	0.2	0.0	0.8	-1.2	-0.2	0.8	0.1	-0.0	
Earthquake X Mode 9					1.5	8.3	-0.5	4.8	-0.4	-0.0	2.5	-5.6	0.5	4.2	-0.3	0.1	
Earthquake Y Mode 1					51.5	20.8	6.6	9.4	4.3	0.7	45.1	-9.2	-4.2	4.2	2.4	-1.3	
Earthquake Y Mode 2					-66.8	-55.6	3.6	-19.5	2.3	0.3	-55.7	5.0	-2.2	-11.7	1.4	-0.6	
Earthquake Y Mode 3					90.4	42.8	7.0	18.4	4.5	0.1	78.7	-15.4	-4.1	9.0	2.5	-2.1	
Earthquake Y Mode 4					-0.9	1.1	0.3	0.6	0.2	0.0	-0.8	-0.7	-0.2	0.5	0.1	-0.1	
Earthquake Y Mode 5					1.8	-4.8	0.3	-2.2	0.2	0.0	1.5	1.7	-0.2	-1.8	0.1	-0.0	
Earthquake Y Mode 6					-4.4	4.8	1.7	2.7	1.2	0.1	-3.7	-3.5	-1.3	2.1	0.8	-0.4	
Earthquake Y Mode 7					0.2	0.4	0.1	0.2	0.1	0.0	0.3	-0.3	-0.1	0.2	0.1	-0.0	
Earthquake Y Mode 8					1.8	3.7	0.6	2.3	0.4	0.0	2.1	-3.0	-0.6	1.9	0.4	-0.1	
Earthquake Y Mode 9					0.6	3.0	-0.2	1.8	-0.1	-0.0	0.9	-2.1	0.2	1.5	-0.1	0.0	
W15	Floor 6	30.0	15.00/17.30	Self weight	30.0	0.7	5.4	-0.1	7.4	-0.5	14.8	1.0	-10.6	0.0	5.2	-0.5	
				Dead load	-0.3	-0.6	7.0	-0.2	3.6	-0.1	-0.3	-0.2	-1.0	-0.1	3.0	-0.0	
				Live load	1.7	0.7	1.0	0.4	1.0	-0.1	1.6	-0.2	-1.2	0.4	0.9	-0.1	
				Wind +X ecc.+	-1.5	0.6	0.3	0.6	0.1	-0.1	-1.6	-0.8	-0.1	0.7	0.2	-0.0	
				Wind +X ecc.-	-1.0	0.5	-0.6	0.5	0.1	-0.1	-0.9	-0.7	-0.8	0.6	-0.0	-0.0	
				Wind -X ecc.+	1.5	-0.6	-0.3	-0.6	-0.1	0.1	1.6	0.8	0.1	-0.7	-0.2	0.0	
				Wind -X ecc.-	1.0	-0.5	0.6	-0.5	-0.1	0.1	0.9	0.7	0.8	-0.6	0.0	0.0	
				Wind +Y ecc.+	3.8	-0.1	-2.5	-0.2	2.2	-0.0	4.5	0.2	-7.1	-0.1	-0.0	-0.0	
				Wind +Y ecc.-	1.9	-0.1	1.4	-0.1	2.4	-0.0	2.2	0.1	-3.6	-0.0	1.1	-0.0	
				Wind -Y ecc.+	-3.8	0.1	2.5	0.2	-2.2	0.0	-4.5	-0.2	7.1	0.1	0.0	0.0	
				Wind -Y ecc.-	-1.9	0.1	-1.4	0.1	-2.4	0.0	-2.2	-0.1	3.6	0.0	-1.1	0.0	
				Earthquake X Mode 1	6.7	1.5	-18.0	1.4	2.6	-0.3	9.1	-2.0	-22.6	2.0	-3.9	-0.1	
				Earthquake X Mode 2	26.4	-6.7	-19.2	-6.7	1.6	0.7	28.9	8.9	-21.0	-7.4	-6.1	0.2	
				Earthquake X Mode 3	0.6	0.2	-1.6	0.2	0.5	-0.1	0.9	-0.3	-2.6	0.3	-0.3	-0.1	
				Earthquake X Mode 4	-1.0	-0.4	2.5	-0.4	-1.2	0.0	-1.5	0.6	4.9	-0.6	0.2	-0.0	
				Earthquake X Mode 5	-7.6	2.6	2.0	2.5	-0.9	-0.3	-8.0	-3.2	3.7	2.8	0.7	-0.1	
				Earthquake X Mode 6	-0.2	-0.0	0.2	-0.0	-0.2	0.0	-0.3	0.1	0.7	-0.1	-0.0	0.0	
				Earthquake X Mode 7	0.3	0.1	0.2	0.1	0.7	0.0	0.4	-0.2	-1.3	0.1	0.3	0.0	
				Earthquake X Mode 8	0.2	0.1	0.5	0.1	0.7	-0.0	0.3	-0.2	-1.1	0.2	0.4	0.0	
				Earthquake X Mode 9	-3.3	1.1	-1.0	1.0	-1.2	-0.1	-3.4	-1.3	1.5	1.2	-0.4	-0.1	
				Earthquake Y Mode 1	3.0	0.7	-8.2	0.7	1.2	-0.1	4.1	-0.9	-10.3	0.9	-1.8	-0.0	
				Earthquake Y Mode 2	8.1	-2.1	-5.9	-2.1	0.5	0.2	8.9	2.8	-6.5	-2.3	-1.9	0.1	
Earthquake Y Mode 3	4.0	1.4	-10.1	1.3	2.9	-0.6	5.6	-1.8	-15.8	1.7	-1.6	-0.4					
Earthquake Y Mode 4	-0.2	-0.1	0.5	-0.1	-0.2	0.0	-0.3	0.1	0.9	-0.1	0.0	-0.0					
Earthquake Y Mode 5	-1.4	0.5	0.4	0.4	-0.2	-0.1	-1.5	-0.6	0.7	0.5	0.1	-0.0					
Earthquake Y Mode 6	-1.9	-0.3	2.0	-0.3	-2.0	0.1	-2.5	0.5	6.1	-0.4	-0.1	0.0					
Earthquake Y Mode 7	0.1	0.0	0.0	0.0	0.2	0.0	0.1	-0.0	-0.4	0.0	0.1	0.0					
Earthquake Y Mode 8	0.5	0.3	1.2	0.3	1.8	-0.0	0.7	-0.4	-2.7	0.4	1.0	0.0					
Earthquake Y Mode 9	-1.2	0.4	-0.4	0.4	-0.4	-0.0	-1.2	-0.5	0.6	0.4	-0.2	-0.0					



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head							
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)		
techo	30.0	12.00/15.00	Self weight	91.8	1.3	-1.4	0.8	0.1	-0.1	71.4	-1.4	-0.1	1.3	-3.2	0.1			
			Dead load	28.9	0.2	11.8	-0.2	12.0	-0.4	28.5	0.1	-21.5	1.1	5.7	0.1			
			Live load	17.7	1.4	-2.8	1.0	-2.1	-0.1	17.5	-1.7	3.8	1.2	-2.3	0.0			
			Wind +X ecc.+	-1.8	0.9	-0.2	0.6	-0.3	-0.1	-1.8	-1.1	0.7	0.7	-0.2	-0.0			
			Wind +X ecc.-	-0.6	0.9	-0.2	0.7	0.6	-0.1	-0.5	-1.1	-1.9	0.7	0.2	0.0			
			Wind -X ecc.+	1.8	-0.9	0.2	-0.6	0.3	0.1	1.8	1.1	-0.7	-0.7	0.2	0.0			
			Wind -X ecc.-	0.6	-0.9	0.2	-0.7	-0.6	0.1	0.5	1.1	1.9	-0.7	-0.2	-0.0			
			Wind +Y ecc.+	8.2	0.1	-0.1	0.1	5.9	0.1	9.2	-0.1	-16.6	0.2	1.9	0.2			
			Wind +Y ecc.-	3.4	0.1	-0.0	0.1	1.7	-0.0	3.9	-0.1	-4.8	0.1	0.2	0.0			
			Wind -Y ecc.+	-8.2	-0.1	0.1	-0.1	-5.9	-0.1	-9.2	0.1	16.6	-0.2	-1.9	-0.2			
			Wind -Y ecc.-	-3.4	-0.1	0.0	-0.1	-1.7	0.0	-3.9	0.1	4.8	-0.1	0.2	-0.0			
			Earthquake X Mode 1	21.8	3.4	3.0	2.4	24.2	0.5	25.0	-4.2	-65.5	3.0	10.2	0.8			
			Earthquake X Mode 2	40.8	-13.1	8.6	-9.8	28.3	1.7	43.6	16.7	-71.5	-11.1	12.5	0.9			
			Earthquake X Mode 3	2.3	0.5	0.2	0.4	2.5	-0.1	2.7	-0.7	-6.8	0.5	1.0	-0.0			
			Earthquake X Mode 4	-2.3	-0.8	-6.9	-0.6	-6.7	-0.1	-2.9	1.0	12.4	-0.7	-3.9	-0.2			
			Earthquake X Mode 5	-4.0	3.9	-7.6	2.9	-7.3	-0.4	-4.4	-5.0	13.2	3.4	-4.3	-0.2			
			Earthquake X Mode 6	-0.4	-0.1	-1.0	-0.1	-0.9	0.0	-0.5	0.1	1.7	-0.1	-0.5	-0.0			
			Earthquake X Mode 7	0.3	0.1	4.3	0.1	2.2	0.0	0.4	-0.2	-2.2	0.1	1.6	0.0			
			Earthquake X Mode 8	0.3	0.2	3.0	0.1	1.5	-0.0	0.4	-0.2	-1.3	0.2	1.0	0.0			
			Earthquake X Mode 9	-1.0	1.0	-6.2	0.7	-3.2	-0.1	-1.1	-1.3	3.0	0.8	-2.2	-0.0			
			Earthquake Y Mode 1	9.9	1.5	1.4	1.1	11.0	0.2	11.3	-1.9	-29.7	1.4	4.6	0.4			
			Earthquake Y Mode 2	12.6	-4.0	2.6	-3.0	8.7	0.5	13.5	5.1	-22.1	-3.4	3.9	0.3			
			Earthquake Y Mode 3	14.2	3.3	1.2	2.4	15.3	-0.3	16.4	-4.0	-42.1	2.8	6.1	-0.1			
			Earthquake Y Mode 4	-0.4	-0.2	-1.3	-0.1	-1.3	-0.0	-0.6	0.2	2.4	-0.1	-0.7	-0.0			
			Earthquake Y Mode 5	-0.7	0.7	-1.4	0.5	-1.3	-0.1	-0.8	-0.9	2.4	0.6	-0.8	-0.0			
			Earthquake Y Mode 6	-3.2	-0.6	-7.9	-0.5	-7.7	0.0	-3.9	0.8	14.1	-0.6	-4.3	-0.0			
			Earthquake Y Mode 7	0.1	0.0	1.3	0.0	0.7	0.0	0.1	-0.1	-0.7	0.0	0.5	0.0			
			Earthquake Y Mode 8	0.8	0.4	7.5	0.3	3.7	-0.0	0.9	-0.5	-3.2	0.4	2.5	0.0			
			Earthquake Y Mode 9	-0.4	0.4	-2.3	0.3	-1.2	-0.0	-0.4	-0.5	1.1	0.3	-0.8	-0.0			
			Floor 4	30.0	9.00/12.00	Self weight	150.4	1.8	-3.9	1.3	-2.0	0.1	128.9	-2.0	4.2	1.0	-5.3	-0.0
						Dead load	57.5	0.9	3.9	0.7	1.2	-0.0	58.0	-1.4	2.1	0.8	-3.7	0.1
						Live load	32.4	1.5	-1.7	1.2	-0.5	-0.0	31.7	-1.9	0.3	1.0	-1.0	-0.0
						Wind +X ecc.+	-1.3	1.5	-0.2	1.1	-0.1	-0.1	-1.4	-2.0	0.2	1.4	0.0	0.0
						Wind +X ecc.-	-0.2	1.6	-0.1	1.1	0.7	-0.1	-0.1	-2.0	-2.0	1.3	0.2	0.0
						Wind -X ecc.+	1.3	-1.5	0.2	-1.1	0.1	0.1	1.4	2.0	-0.2	-1.4	-0.0	-0.0
						Wind -X ecc.-	0.2	-1.6	0.1	-1.1	-0.7	0.1	0.1	2.0	2.0	-1.3	-0.2	-0.0
Wind +Y ecc.+	8.0	0.2				1.3	0.2	6.4	0.3	9.7	-0.0	-16.6	-0.4	1.1	-0.0			
Wind +Y ecc.-	3.2	0.2				1.1	0.1	2.6	0.0	3.8	-0.1	-6.4	-0.1	0.6	-0.1			
Wind -Y ecc.+	-8.0	-0.2				-1.3	-0.2	-6.4	-0.3	-9.7	0.0	16.6	0.4	-1.1	0.0			
Wind -Y ecc.-	-3.2	-0.2				-1.1	-0.1	-2.6	-0.0	-3.8	0.1	6.4	0.1	-0.6	0.1			
Earthquake X Mode 1	21.7	5.6				10.0	4.2	23.0	0.9	27.6	-6.3	-54.5	2.9	4.7	0.4			
Earthquake X Mode 2	32.9	-20.3				13.7	-14.9	22.8	2.6	39.8	26.9	-50.4	-19.9	3.8	-0.2			
Earthquake X Mode 3	2.3	0.8				1.4	0.6	2.7	-0.0	2.9	-0.9	-6.1	0.5	0.7	-0.1			
Earthquake X Mode 4	-0.9	-0.7				-12.0	-0.5	-5.0	-0.1	-1.9	0.8	2.3	-0.3	-2.1	-0.1			
Earthquake X Mode 5	2.3	3.1				-11.5	2.3	-4.7	-0.4	1.2	-4.2	2.0	3.1	-2.0	0.1			
Earthquake X Mode 6	-0.1	-0.1				-1.8	-0.1	-0.8	-0.0	-0.3	0.1	0.4	-0.0	-0.3	0.0			
Earthquake X Mode 7	0.0	-0.0				2.1	-0.0	-0.5	0.0	0.3	0.0	3.5	-0.0	-0.6	-0.0			
Earthquake X Mode 8	0.1	-0.1				1.5	-0.0	-0.3	0.0	0.3	0.1	2.5	-0.1	-0.4	-0.0			
Earthquake X Mode 9	0.5	-0.3				-2.7	-0.2	0.8	0.0	0.1	0.3	-4.9	-0.2	0.9	0.0			
Earthquake Y Mode 1	9.8	2.5				4.5	1.9	10.4	0.4	12.5	-2.8	-24.7	1.3	2.1	0.2			
Earthquake Y Mode 2	10.2	-6.3				4.2	-4.6	7.0	0.8	12.3	8.3	-15.6	-6.2	1.2	-0.0			
Earthquake Y Mode 3	14.1	5.1				8.8	3.8	16.4	-0.3	18.0	-5.8	-37.4	2.9	4.1	-0.5			
Earthquake Y Mode 4	-0.2	-0.1				-2.3	-0.1	-1.0	-0.0	-0.4	0.2	0.4	-0.1	-0.4	-0.0			
Earthquake Y Mode 5	0.4	0.6				-2.1	0.4	-0.8	-0.1	0.2	-0.8	0.4	0.6	-0.4	0.0			
Earthquake Y Mode 6	-1.1	-0.6				-14.7	-0.4	-6.2	-0.0	-2.3	0.6	3.2	-0.1	-2.8	0.1			
Earthquake Y Mode 7	0.0	-0.0				0.6	-0.0	-0.1	0.0	0.1	0.0	1.0	-0.0	-0.2	-0.0			
Earthquake Y Mode 8	0.3	-0.1				3.8	-0.1	-0.8	0.0	0.7	0.2	6.1	-0.1	-1.1	-0.0			
Earthquake Y Mode 9	0.2	-0.1				-1.0	-0.1	0.3	0.0	0.0	0.1	-1.8	-0.1	0.3	0.0			
Floor 3	30.0	6.00/9.00				Self weight	205.2	1.7	-2.7	1.3	-0.0	0.1	182.7	-1.9	0.7	0.9	-4.9	-0.1
						Dead load	82.8	0.6	5.0	0.5	4.1	-0.0	82.2	-0.8	-4.9	0.5	-1.2	-0.0
						Live load	46.9	1.3	-1.9	1.0	-0.7	-0.0	46.1	-1.7	0.9	0.9	-1.7	-0.0
						Wind +X ecc.+	-0.0	2.3	-0.2	1.7	-0.2	-0.2	-0.1	-2.9	0.3	2.0	-0.1	0.0
						Wind +X ecc.-	0.8	2.3	0.8	1.7	1.2	-0.1	1.0	-2.9	-2.6	1.9	0.4	0.0
						Wind -X ecc.+	0.0	-2.3	0.2	-1.7	0.2	0.2	0.1	2.9	-0.3	-2.0	0.1	-0.0
						Wind -X ecc.-	-0.8	-2.3	-0.8	-1.7	-1.2	0.1	-1.0	2.9	2.6	-1.9	-0.4	-0.0
			Wind +Y ecc.+	5.9	0.2	8.1	0.2	10.1	0.3	8.1	0.1	-20.7	-0.6	3.3	-0.0			
			Wind +Y ecc.-	2.4	0.2	3.4	0.1	3.7	-0.0	3.2	-0.1	-7.2	-0.1	1.1	-0.1			
			Wind -Y ecc.+	-5.9	-0.2	-8.1	-0.2	-10.1	-0.3	-8.1	-0.1	20.7	0.6	-3.3	0.0			
			Wind -Y ecc.-	-2.4	-0.2	-3.4	-0.1	-3.7	0.0	-3.2	0.1	7.2	0.1	-1.1	0.1			
			Earthquake X Mode 1	18.2	7.2	34.8	5.4	34.6	1.0	25.3	-8.2	-63.3	3.9	11.6	0.5			
			Earthquake X Mode 2	9.5	-27.3	35.7	-20.0	33.1	3.4	17.6	35.8	-59.0	-26.4	11.1	-0.2			
			Earthquake X Mode 3	2.0	1.0	4.0	0.8	3.7	-0.1	2.8	-1.2	-6.4	0.6	1.2	-0.1			
			Earthquake X Mode 4	-0.3	-0.1	-10.2	-0.1	-1.1	-0.0	-1.2	0.1	-7.2	0.0	0.3	0.0			
			Earthquake X Mode 5	5.0	0.2	-9.2	0.1	-0.9	-0.1	4.0	-0.3	-6.6	0.4	0.2	0.0			
			Earthquake X Mode 6	-0.0	-0.0	-1.5	-0.0	-0.1	-0.0	-0.1	0.0	-1.1	0.0	0.1	0.0			
			Earthquake X Mode 7	0.3	-0.2	-3.4	-0.1	-2.4	-0.0	0.4	0.2	3.5	-0.1	-1.8	-0.0			
			Earthquake X Mode 8	0.2	-0.2	-2.5	-0.2	-1.7	0.0	0.3	0.2	2.5	-0.1	-1.3	-0.0			
			Earthquake X Mode 9	-1.1	-1.1	4.9	-0.8	3.4	0.1	-1.1	1.5	-4.8	-1.1	2.6	-0.0			
			Earthquake Y Mode 1	8.3	3.3	15.8	2.5	15.7	0.4	11.5	-3.7	-28.7	1.8	5.2	0.2			
			Earthquake Y Mode 2	2.9	-8.4	11.0	-6.2	10.2	1.0	5.5	11.1	-18.2	-8.2	3.4	-0.1			
			Earthquake Y Mode 3	12.5	6.4	24.8	4.8	22.7	-0.5	17.3	-7.4	-39.7	3.8	7.5	-0.7			
			Earthquake Y Mode 4	-0.1	-0.0	-2.0	-0.0	-0.2	-0.0	-0.2	0.0	-1.4	0.0	0.1	0.0			
			Earthquake Y Mode 5	0.9	0.0	-1.7	0.0	-0.2	-0.0	0.7	-0.1	-1.2	0.1	0.0	0.0			
			Earthquake Y Mode 6	-0.2	-0.1	-12.1	-0.1	-1.1	-0.0	-1.2	0.0	-8.9	0.1	0.5	0.1			
			Earthquake Y Mode 7	0.1	-0.1	-1.0	-0.0	-0.7	-0.0	0.1	0.1	1.1	-0.0	-0.6	-0.0			
			Earthquake Y Mode 8	0.5	-0.5	-6.2	-0.4	-4.3	0.0	0.7	0.6	6.3	-0.4	-3.3	-0.0			
			Earthquake Y Mode 9	-0.4	-0.4	1.8	-0.3	1.2	0.0	-0.4	0.6	-1.8	-0.4	0.9	-0.0			



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	30.0	3.00/6.00	Self weight	254.3	1.4	-0.4	1.1	1.4	0.1	231.2	-1.7	-0.3	0.7	-5.2	-0.1
				Dead load	106.9	0.4	5.1	0.3	3.8	-0.0	106.0	-0.6	-3.6	0.3	-2.0	0.0
				Live load	58.8	1.0	-0.5	0.8	0.3	0.0	57.9	-1.3	-0.4	0.6	-1.2	-0.0
				Wind +X ecc.+	2.3	2.8	-0.3	2.0	-0.2	-0.2	2.2	-3.5	0.4	2.4	-0.2	0.0
				Wind +X ecc.-	2.5	2.8	2.4	2.0	1.7	-0.1	2.7	-3.4	-2.2	2.3	0.6	0.1
				Wind -X ecc.+	-2.3	-2.8	0.3	-2.0	0.2	0.2	-2.2	3.5	-0.4	-2.4	0.2	-0.0
				Wind -X ecc.-	-2.5	-2.8	-2.4	-2.0	-1.7	0.1	-2.7	3.4	2.2	-2.3	-0.6	-0.1
				Wind +Y ecc.+	1.2	0.1	20.2	0.1	13.5	0.3	3.8	0.2	-18.2	-0.7	5.4	-0.1
				Wind +Y ecc.-	0.8	0.2	7.7	0.2	4.8	-0.0	1.8	-0.1	-6.1	-0.2	1.9	-0.2
				Wind -Y ecc.+	-1.2	-0.1	-20.2	-0.1	-13.5	-0.3	-3.8	-0.2	18.2	0.7	-5.4	0.1
				Wind -Y ecc.-	-0.8	-0.2	-7.7	-0.2	-4.8	0.0	-1.8	0.1	6.1	0.2	-1.9	0.2
				Earthquake X Mode 1	9.8	7.8	68.3	5.8	40.4	1.0	18.1	-8.8	-47.0	4.2	15.2	0.4
				Earthquake X Mode 2	-28.8	-30.3	64.5	-22.0	37.6	3.5	-19.2	39.1	-44.3	-28.9	15.2	-0.3
				Earthquake X Mode 3	1.4	1.1	7.5	0.8	4.2	-0.1	2.3	-1.3	-4.5	0.7	1.5	-0.1
				Earthquake X Mode 4	-0.9	0.6	0.3	0.4	4.5	0.0	-1.3	-0.7	-12.5	0.4	3.5	0.1
				Earthquake X Mode 5	1.3	-3.0	0.8	-2.2	4.3	0.2	1.0	3.8	-11.7	-2.7	3.4	-0.1
				Earthquake X Mode 6	-0.1	0.1	0.1	0.0	0.7	-0.0	-0.2	-0.1	-1.8	0.0	0.5	-0.0
				Earthquake X Mode 7	0.6	-0.0	-2.8	-0.0	-0.2	-0.0	0.4	0.0	-2.3	0.0	0.1	0.0
				Earthquake X Mode 8	0.4	-0.0	-1.9	-0.0	-0.1	0.0	0.2	0.0	-1.7	-0.0	0.1	0.0
				Earthquake X Mode 9	-2.3	-0.1	3.6	-0.1	0.1	0.0	-1.9	0.2	3.2	-0.2	-0.2	-0.0
				Earthquake Y Mode 1	4.4	3.5	31.0	2.6	18.3	0.4	8.2	-4.0	-21.3	1.9	6.9	0.2
				Earthquake Y Mode 2	-8.9	-9.4	19.9	-6.8	11.6	1.1	-5.9	12.1	-13.7	-8.9	4.7	-0.1
				Earthquake Y Mode 3	8.7	6.9	46.2	5.1	25.8	-0.6	14.1	-7.9	-27.4	4.1	9.5	-0.8
				Earthquake Y Mode 4	-0.2	0.1	0.1	0.1	0.9	0.0	-0.2	-0.1	-2.4	0.1	0.7	0.0
				Earthquake Y Mode 5	0.2	-0.5	0.1	-0.4	0.8	0.0	0.2	0.7	-2.1	-0.5	0.6	-0.0
				Earthquake Y Mode 6	-1.1	0.5	0.9	0.3	5.5	-0.0	-1.5	-0.5	-15.0	0.3	4.3	-0.0
				Earthquake Y Mode 7	0.2	-0.0	-0.8	-0.0	-0.1	-0.0	0.1	0.0	-0.7	0.0	0.0	0.0
				Earthquake Y Mode 8	1.0	-0.0	-4.7	-0.0	-0.2	0.0	0.6	0.1	-4.1	-0.0	0.3	0.0
				Earthquake Y Mode 9	-0.8	-0.0	1.3	-0.0	0.0	0.0	-0.7	0.1	1.2	-0.1	-0.1	-0.0
	Floor 1	30.0	0.00/3.00	Self weight	289.7	0.6	3.4	0.5	3.6	0.1	266.1	-0.8	-2.3	0.0	-4.3	-0.1
				Dead load	128.7	0.1	4.3	0.1	3.6	-0.0	127.4	-0.2	-3.4	0.1	-2.6	-0.0
				Live load	64.3	0.4	1.4	0.4	1.3	0.0	63.3	-0.6	-1.4	0.1	-0.6	-0.1
				Wind +X ecc.+	5.0	1.9	-0.5	1.4	-0.2	-0.2	4.9	-2.5	0.3	1.7	-0.3	0.0
				Wind +X ecc.-	4.2	1.9	8.0	1.4	2.9	-0.1	4.3	-2.4	-0.4	1.6	1.7	0.0
				Wind -X ecc.+	-5.0	-1.9	0.5	-1.4	0.2	0.2	-4.9	2.5	0.3	-1.7	0.3	-0.0
				Wind -X ecc.-	-4.2	-1.9	-8.0	-1.4	-2.9	0.1	-4.3	2.4	0.4	-1.6	-1.7	-0.0
				Wind +Y ecc.+	-4.9	0.1	58.6	0.1	21.7	0.2	-2.9	0.2	-4.2	-0.7	13.7	-0.1
				Wind +Y ecc.-	-1.1	0.1	19.5	0.1	7.0	-0.0	-0.3	-0.1	-0.7	-0.2	4.2	-0.1
				Wind -Y ecc.+	4.9	-0.1	-58.6	-0.1	-21.7	-0.2	2.9	-0.2	4.2	0.7	-13.7	0.1
				Wind -Y ecc.-	1.1	-0.1	-19.5	-0.1	-7.0	0.0	0.3	0.1	0.7	0.2	-4.2	0.1
				Earthquake X Mode 1	-1.2	4.7	163.9	3.6	57.3	0.6	4.9	-5.4	-1.8	2.2	34.2	0.1
				Earthquake X Mode 2	-70.4	-18.7	144.9	-13.8	50.7	2.4	-62.8	25.6	-3.6	-19.2	31.9	-0.4
				Earthquake X Mode 3	0.7	0.7	15.5	0.5	5.1	-0.1	1.3	-0.8	0.6	0.4	2.9	-0.1
				Earthquake X Mode 4	-2.5	0.5	20.0	0.4	9.1	0.1	-2.3	-0.7	-6.3	0.3	6.7	0.0
				Earthquake X Mode 5	-5.7	-2.7	18.6	-2.1	8.5	0.3	-5.4	4.0	-6.1	-2.8	6.4	-0.1
Earthquake X Mode 6				-0.4	0.1	2.8	0.0	1.3	-0.0	-0.4	-0.1	-0.8	0.0	0.9	-0.0	
Earthquake X Mode 7				0.5	0.1	5.2	0.1	3.1	0.0	0.3	-0.1	-3.7	0.1	2.5	0.0	
Earthquake X Mode 8				0.4	0.1	3.6	0.1	2.1	-0.0	0.2	-0.2	-2.5	0.1	1.7	0.0	
Earthquake X Mode 9				-0.9	0.7	-7.1	0.5	-4.2	-0.0	-0.7	-1.0	5.1	0.7	-3.5	0.0	
Earthquake Y Mode 1				-0.5	2.1	74.4	1.6	26.0	0.3	2.2	-2.4	-0.8	1.0	15.5	0.0	
Earthquake Y Mode 2				-21.7	-5.8	44.7	-4.3	15.7	0.7	-19.4	7.9	-1.1	-5.9	9.9	-0.1	
Earthquake Y Mode 3				4.2	4.2	95.2	3.2	31.7	-0.4	8.2	-5.0	3.8	2.4	17.7	-0.7	
Earthquake Y Mode 4				-0.5	0.1	3.9	0.1	1.8	0.0	-0.5	-0.1	-1.2	0.1	1.3	0.0	
Earthquake Y Mode 5				-1.0	-0.5	3.4	-0.4	1.5	0.1	-1.0	0.7	-1.1	-0.5	1.2	-0.0	
Earthquake Y Mode 6				-3.2	0.4	23.2	0.3	10.4	-0.0	-3.0	-0.5	-6.9	0.2	7.5	-0.1	
Earthquake Y Mode 7				0.1	0.0	1.6	0.0	0.9	0.0	0.1	-0.0	-1.1	0.0	0.8	0.0	
Earthquake Y Mode 8				0.9	0.3	9.0	0.2	5.3	-0.0	0.5	-0.4	-6.3	0.2	4.3	0.0	
Earthquake Y Mode 9				-0.3	0.3	-2.6	0.2	-1.5	-0.0	-0.2	-0.4	1.9	0.3	-1.3	0.0	
W16	Floor 6	30.0	15.00/17.30	Self weight	34.6	-0.8	-0.5	-1.2	-7.8	0.0	18.2	1.6	16.3	-0.5	-5.2	-0.3
				Dead load	0.5	-1.5	-13.8	-0.9	-5.4	0.1	-0.0	0.8	-1.8	-1.2	-5.0	0.3
				Live load	3.3	0.2	1.8	0.0	-1.0	0.1	3.4	0.1	4.0	0.2	-0.5	-0.0
				Wind +X ecc.+	-1.3	0.7	0.4	0.7	0.0	0.0	-1.2	-0.9	0.4	0.8	0.0	-0.0
				Wind +X ecc.-	-1.9	0.9	-1.0	0.8	-0.3	0.0	-2.0	-1.1	-0.4	0.9	-0.4	-0.0
				Wind -X ecc.+	1.3	-0.7	-0.4	-0.7	-0.0	-0.0	1.2	0.9	-0.4	-0.8	-0.0	0.0
				Wind -X ecc.-	1.9	-0.9	1.0	-0.8	0.3	-0.0	2.0	1.1	0.4	-0.9	0.4	0.0
				Wind +Y ecc.+	-4.5	0.8	-6.0	0.7	0.8	-0.0	-5.2	-0.8	-7.6	0.6	-0.7	0.0
				Wind +Y ecc.-	-2.2	0.3	0.7	0.3	2.1	-0.0	-2.4	-0.3	-3.8	0.2	1.1	-0.0
				Wind -Y ecc.+	4.5	-0.8	6.0	-0.7	-0.8	0.0	5.2	0.8	7.6	-0.6	0.7	-0.0
				Wind -Y ecc.-	2.2	-0.3	-0.7	-0.3	-2.1	0.0	2.4	0.3	3.8	-0.2	-1.1	0.0
				Earthquake X Mode 1	-17.5	4.9	-32.1	4.3	-3.9	0.1	-20.1	-5.0	-23.0	4.3	-7.8	0.0
				Earthquake X Mode 2	2.0	-6.1	-35.3	-6.0	-3.2	-0.5	-1.0	8.4	-28.0	-7.6	-7.2	0.4
				Earthquake X Mode 3	-1.8	0.5	-3.2	0.4	-0.2	-0.1	-2.1	-0.5	-2.6	0.4	-0.7	-0.1
				Earthquake X Mode 4	3.9	-1.1	4.9	-1.0	-0.0	-0.1	4.4	1.1	4.8	-0.9	0.9	-0.1
				Earthquake X Mode 5	-2.1	1.9	4.5	1.9	-0.6	0.1	-1.6	-2.7	5.8	2.4	0.3	-0.2
				Earthquake X Mode 6	0.5	-0.1	0.6	-0.1	-0.1	0.0	0.5	0.1	0.8	-0.1	0.1	0.0
				Earthquake X Mode 7	-1.2	0.3	-0.1	0.3	0.5	0.0	-1.3	-0.4	-1.3	0.3	0.2	0.0
				Earthquake X Mode 8	-0.9	0.2	0.4	0.2	0.6	0.0	-1.0	-0.3	-1.0	0.2	0.4	0.0
				Earthquake X Mode 9	-0.6	0.7	-0.8	0.7	-1.4	-0.0	-0.5	-1.0	2.3	0.8	-0.9	-0.1
				Earthquake Y Mode 1	-7.9	2.2	-14.6	2.0	-1.8	0.0	-9.1	-2.3	-10.5	1.9	-3.5	0.0
				Earthquake Y Mode 2	0.6	-1.9	-10.9	-1.8	-1.0	-0.2	-0.3	2.6	-8.6	-2.3	-2.2	0.1
				Earthquake Y Mode 3	-11.3	2.8	-19.6	2.4	-1.5	-0.4	-13.0	-2.8	-16.0	2.4	-4.3	-0.4
Earthquake Y Mode 4	0.7	-0.2	0.9	-0.2	-0.0	-0.0	0.8	0.2	0.9	-0.2	0.2	-0.0				
Earthquake Y Mode 5	-0.4	0.3	0.8	0.3	-0.1	0.0	-0.3	-0.5	1.0	0.4	0.1	-0.0				
Earthquake Y Mode 6	3.7	-0.7	4.7	-0.6	-0.7	0.0	4.3	0.6	6.2	-0.5	0.5	0.0				
Earthquake Y Mode 7	-0.4	0.1	-0.0	0.1	0.2	0.0	-0.4	-0.1	-0.4	0.1	0.1	0.0				
Earthquake Y Mode 8	-2.3	0.6	0.9	0.5	1.6	0.0	-2.5	-0.7	-2.6	0.5	0.9	0.0				
Earthquake Y Mode 9	-0.2	0.2	-0.3	0.2	-0.5	-0.0	-0.2	-0.4	0.9	0.3	-0.3	-0.0				



Column, shear wall and wall forces and reinforcement

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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
	techo	30.0	12.00/15.00	Self weight	102.9	-0.0	6.2	-0.1	4.1	-0.3	80.3	0.4	-9.3	-0.3	11.4	-0.2			
				Dead load	19.0	-0.8	-0.5	-0.9	-4.4	0.3	19.1	1.8	11.2	-0.6	-0.6	0.2			
				Live load	15.5	0.5	1.9	0.4	0.8	-0.1	15.4	-0.6	-1.2	0.4	2.8	-0.1			
				Wind +X ecc.+	-0.9	1.1	-0.3	0.8	-0.3	0.1	-0.9	-1.5	0.6	1.0	-0.1	-0.0			
				Wind +X ecc.-	-1.4	1.3	-0.6	1.0	0.6	0.1	-1.6	-1.7	-2.5	1.1	0.4	0.0			
				Wind -X ecc.+	0.9	-1.1	0.3	-0.8	0.3	-0.1	0.9	1.5	-0.6	-1.0	0.1	0.0			
				Wind -X ecc.-	1.4	-1.3	0.6	-1.0	-0.6	-0.1	1.6	1.7	2.5	-1.1	-0.4	-0.0			
				Wind +Y ecc.+	-3.4	1.3	-2.9	1.0	5.5	0.1	-4.8	-1.6	-18.9	1.1	2.2	0.0			
				Wind +Y ecc.-	-1.7	0.3	-1.1	0.2	1.3	-0.0	-2.2	-0.4	-4.9	0.3	0.1	-0.0			
				Wind -Y ecc.+	3.4	-1.3	2.9	-1.0	-5.5	-0.1	4.8	1.6	18.9	-1.1	-2.2	-0.0			
				Wind -Y ecc.-	1.7	-0.3	1.1	-0.2	-1.3	0.0	2.2	0.4	4.9	-0.3	-0.1	0.0			
				Earthquake X Mode 1	-12.7	9.3	-5.5	7.1	24.6	1.0	-17.6	-12.2	-77.4	7.9	13.1	0.4			
				Earthquake X Mode 2	4.1	-11.5	2.2	-8.7	28.5	-0.3	-0.2	15.3	-80.1	-10.1	14.7	0.6			
				Earthquake X Mode 3	-1.3	0.8	-0.9	0.6	2.4	-0.0	-1.9	-1.0	-7.8	0.7	1.1	-0.1			
				Earthquake X Mode 4	3.5	-1.8	-7.4	-1.3	-7.5	-0.2	4.3	2.3	14.5	-1.5	-5.0	-0.1			
				Earthquake X Mode 5	-6.7	3.2	-8.4	2.4	-7.8	0.1	-6.1	-4.1	14.4	2.8	-5.3	-0.2			
				Earthquake X Mode 6	0.3	-0.1	-1.0	-0.1	-1.0	0.0	0.4	0.2	2.0	-0.1	-0.7	0.0			
				Earthquake X Mode 7	-1.3	0.3	5.4	0.3	2.7	0.0	-1.4	-0.4	-2.4	0.3	2.1	0.0			
				Earthquake X Mode 8	-0.9	0.2	3.8	0.1	1.8	0.0	-0.9	-0.2	-1.4	0.2	1.3	-0.0			
				Earthquake X Mode 9	-2.6	0.8	-7.7	0.6	-3.6	0.0	-2.5	-1.0	2.9	0.7	-2.8	-0.0			
				Earthquake Y Mode 1	-5.8	4.2	-2.5	3.2	11.2	0.5	-8.0	-5.5	-35.1	3.6	5.9	0.2			
				Earthquake Y Mode 2	1.3	-3.6	0.7	-2.7	8.8	-0.1	-0.1	4.7	-24.7	-3.1	4.5	0.2			
				Earthquake Y Mode 3	-8.2	4.8	-5.4	3.7	14.7	-0.1	-11.4	-6.3	-48.2	4.1	7.0	-0.5			
				Earthquake Y Mode 4	0.7	-0.3	-1.4	-0.3	-1.4	-0.0	0.8	0.4	2.8	-0.3	-1.0	-0.0			
				Earthquake Y Mode 5	-1.2	0.6	-1.5	0.4	-1.4	0.0	-1.1	-0.7	2.6	0.5	-1.0	-0.0			
				Earthquake Y Mode 6	2.1	-1.0	-8.4	-0.7	-8.4	0.0	3.0	1.3	16.1	-0.8	-5.5	0.1			
				Earthquake Y Mode 7	-0.4	0.1	1.6	0.1	0.8	0.0	-0.4	-0.1	-0.7	0.1	0.6	0.0			
				Earthquake Y Mode 8	-2.2	0.5	9.5	0.4	4.4	0.0	-2.4	-0.6	-3.4	0.4	3.3	-0.0			
				Earthquake Y Mode 9	-0.9	0.3	-2.8	0.2	-1.3	0.0	-0.9	-0.4	1.1	0.2	-1.0	-0.0			
				Floor 4	30.0	9.00/12.00	Self weight	161.6	0.4	5.0	0.3	4.2	-0.2	139.8	-0.4	-10.6	0.1	11.7	-0.2
							Dead load	49.4	0.1	-1.1	0.1	-2.1	-0.1	49.2	-0.3	3.6	0.2	1.7	-0.1
							Live load	32.4	0.5	4.3	0.4	4.2	-0.1	31.9	-0.7	-9.8	0.3	7.1	-0.1
							Wind +X ecc.+	-1.4	1.7	-0.4	1.3	-0.2	0.1	-1.4	-2.2	0.2	1.4	-0.0	0.0
							Wind +X ecc.-	-1.4	1.9	-0.6	1.4	0.6	0.2	-1.8	-2.5	-2.6	1.7	0.3	0.0
							Wind -X ecc.+	1.4	-1.7	0.4	-1.3	0.2	-0.1	1.4	2.2	-0.2	-1.4	0.0	-0.0
							Wind -X ecc.-	1.4	-1.9	0.6	-1.4	-0.6	-0.2	1.8	2.5	2.6	-1.7	-0.3	-0.0
	Wind +Y ecc.+	0.1	1.4				-1.0	1.0	6.7	0.2	-2.2	-1.8	-20.7	1.2	2.7	0.1			
	Wind +Y ecc.-	-0.0	0.2				0.3	0.2	2.8	-0.0	-0.8	-0.3	-7.8	0.2	1.2	-0.1			
	Wind -Y ecc.+	-0.1	-1.4				1.0	-1.0	-6.7	-0.2	2.2	1.8	20.7	-1.2	-2.7	-0.1			
	Wind -Y ecc.-	0.0	-0.2				-0.3	-0.2	-2.8	0.0	0.8	0.3	7.8	-0.2	-1.2	0.1			
	Earthquake X Mode 1	-3.9	11.9				3.5	8.9	24.3	1.7	-11.8	-15.4	-68.3	10.2	10.9	0.9			
	Earthquake X Mode 2	24.9	-17.4				12.1	-13.1	25.9	-0.7	18.3	22.7	-63.1	-14.8	10.7	0.5			
	Earthquake X Mode 3	-0.0	0.9				0.8	0.7	2.8	0.0	-0.9	-1.2	-7.5	0.8	1.3	-0.1			
	Earthquake X Mode 4	2.5	-1.5				-15.3	-1.1	-6.0	-0.2	2.9	1.9	2.1	-1.2	-4.0	-0.1			
	Earthquake X Mode 5	-12.4	2.7				-14.6	1.9	-5.7	0.1	-12.2	-3.2	1.8	2.1	-3.8	-0.0			
Earthquake X Mode 6	-0.1	-0.1	-2.3				-0.1	-0.9	-0.0	-0.0	0.1	0.4	-0.1	-0.6	0.0				
Earthquake X Mode 7	-1.0	-0.0	3.1				-0.0	-0.5	-0.0	-0.7	0.1	4.7	-0.1	-0.4	0.0				
Earthquake X Mode 8	-0.6	-0.0	2.2				-0.0	-0.3	-0.0	-0.4	0.0	3.3	-0.0	-0.3	0.0				
Earthquake X Mode 9	-2.9	-0.2	-3.7				-0.2	1.0	-0.0	-3.3	0.3	-6.9	-0.2	0.8	0.0				
Earthquake Y Mode 1	-1.8	5.4	1.6				4.0	11.0	0.8	-5.4	-7.0	-31.0	4.6	4.9	0.4				
Earthquake Y Mode 2	7.7	-5.4	3.7				-4.0	8.0	-0.2	5.6	7.0	-19.5	-4.6	3.3	0.1				
Earthquake Y Mode 3	-0.2	5.5	4.7				4.1	17.2	0.0	-5.3	-7.2	-45.9	4.9	8.0	-0.5				
Earthquake Y Mode 4	0.5	-0.3	-2.9				-0.2	-1.2	-0.0	0.6	0.4	0.4	-0.2	-0.8	-0.0				
Earthquake Y Mode 5	-2.2	0.5	-2.7				0.4	-1.0	0.0	-2.2	-0.6	0.3	0.4	-0.7	-0.0				
Earthquake Y Mode 6	-0.7	-0.7	-18.6				-0.5	-7.5	-0.0	-0.3	1.0	3.1	-0.7	-5.1	0.0				
Earthquake Y Mode 7	-0.3	-0.0	0.9				-0.0	-0.1	-0.0	-0.2	0.0	1.4	-0.0	-0.1	0.0				
Earthquake Y Mode 8	-1.4	-0.1	5.5				-0.1	-0.8	-0.0	-1.0	0.1	8.2	-0.1	-0.7	0.0				
Earthquake Y Mode 9	-1.1	-0.1	-1.3				-0.1	0.4	-0.0	-1.2	0.1	-2.5	-0.1	0.3	0.0				
Floor 3	30.0	6.00/9.00	Self weight				220.0	0.4	5.0	0.3	4.8	-0.2	198.7	-0.4	-12.4	0.1	13.3	-0.1	
			Dead load				76.7	0.1	-2.2	0.0	-3.0	-0.0	76.8	-0.1	4.9	0.1	1.7	-0.1	
			Live load				48.3	0.4	3.4	0.3	3.2	-0.1	47.9	-0.6	-7.8	0.2	6.4	-0.1	
			Wind +X ecc.+				-3.5	2.3	-0.6	1.7	-0.4	0.2	-3.5	-2.9	0.6	1.9	-0.2	0.0	
			Wind +X ecc.-				-3.0	2.6	0.3	1.9	1.1	0.2	-3.4	-3.3	-3.0	2.2	0.6	0.1	
			Wind -X ecc.+				3.5	-2.3	0.6	-1.7	0.4	-0.2	3.5	2.9	-0.6	-1.9	0.2	-0.0	
			Wind -X ecc.-				3.0	-2.6	-0.3	-1.9	-1.1	-0.2	3.4	3.3	3.0	-2.2	-0.6	-0.1	
			Wind +Y ecc.+	5.1	1.5	7.2	1.1	10.9	0.2	2.6	-2.0	-24.9	1.3	5.7	0.1				
			Wind +Y ecc.-	2.5	0.1	3.2	0.1	4.0	-0.1	1.6	-0.2	-8.5	0.1	2.1	-0.1				
			Wind -Y ecc.+	-5.1	-1.5	-7.2	-1.1	-10.9	-0.2	-2.6	2.0	24.9	-1.3	-5.7	-0.1				
			Wind -Y ecc.-	-2.5	-0.1	-3.2	-0.1	-4.0	0.1	-1.6	0.2	8.5	-0.1	-2.1	0.1				
			Earthquake X Mode 1	3.3	14.0	34.0	10.5	36.9	2.1	-4.9	-18.2	-74.5	12.0	20.2	1.0				
			Earthquake X Mode 2	65.7	-22.5	40.6	-16.7	38.4	-1.0	59.4	28.8	-71.1	-18.9	21.0	0.4				
			Earthquake X Mode 3	1.6	0.9	4.1	0.7	3.9	-0.0	0.7	-1.3	-7.4	0.9	2.1	-0.1				
			Earthquake X Mode 4	1.5	-0.4	-13.9	-0.3	-1.3	-0.1	0.9	0.5	-10.7	-0.3	-0.7	-0.1				
			Earthquake X Mode 5	-14.4	0.5	-12.1	0.2	-0.8	0.0	-15.1	-0.2	-10.2	0.1	-0.6	0.1				
			Earthquake X Mode 6	-0.3	-0.0	-2.0	-0.0	-0.2	-0.0	-0.4	0.0	-1.6	-0.0	-0.1	-0.0				
			Earthquake X Mode 7	-0.5	-0.3	-4.3	-0.2	-3.0	-0.0	-0.3	0.4	4.5	-0.3	-2.4	-0.0				
			Earthquake X Mode 8	-0.3	-0.2	-3.1	-0.1	-2.1	-0.0	-0.2	0.2	3.3	-0.2	-1.7	0.0				
			Earthquake X Mode 9	-0.5	-0.9	6.4	-0.7	4.4	-0.0	-0.9	1.2	-6.5	-0.8	3.5	0.0				
			Earthquake Y Mode 1	1.5	6.4	15.4	4.8	16.7	0.9	-2.2	-8.3	-33.8	5.5	9.2	0.5				
			Earthquake Y Mode 2	20.3	-7.0	12.5	-5.2	11.9	-0.3	18.3	8.9	-22.0	-5.8	6.5	0.1				
			Earthquake Y Mode 3	9.6	5.8	24.9	4.4	24.1	-0.1	4.6	-7.7	-45.7	5.2	13.1	-0.6				
			Earthquake Y Mode 4	0.3	-0.1	-2.7	-0.1	-0.2	-0.0	0.2	0.1	-2.1	-0.1	-0.1	-0.0				
Earthquake Y Mode 5	-2.6	0.1	-2.2	0.0	-0.1	0.0	-2.8	-0.0	-1.9	0.0	-0.1	0.0							
Earthquake Y Mode 6	-2.5	-0.2	-16.4	-0.1	-1.3	-0.0	-3.3	0.3	-13.2	-0.2	-0.7	-0.0							
Earthquake Y Mode 7	-0.2	-0.1	-1.3	-0.1	-0.9	-0.0	-0.1	0.1	1.4	-0.1	-0.7	-0.0							
Earthquake Y Mode 8	-0.9	-0.4	-7.7	-0.3	-5.3	-0.0	-0.4	0.6	8.1	-0.4	-4.3	0.0							
Earthquake Y Mode 9	-0.2	-0.3	2.3	-0.2	1.6	-0.0	-0.3	0.4	-2.4	-0.3	1.3	0.0							



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 2	30.0	3.00/6.00	Self weight	275.8	0.3	6.5	0.2	5.3	-0.2	255.1	-0.3	-12.5	0.0	14.8	-0.1
				Dead load	103.8	0.2	-1.8	0.1	-2.6	-0.0	104.2	-0.2	4.1	0.2	2.7	-0.1
				Live load	62.7	0.2	4.2	0.2	3.8	-0.1	62.5	-0.3	-8.6	0.1	7.1	-0.1
				Wind +X ecc.+	-7.1	2.6	-0.8	1.9	-0.5	0.2	-7.2	-3.3	0.7	2.2	-0.4	0.0
				Wind +X ecc.-	-5.9	3.0	2.3	2.2	1.6	0.3	-6.3	-3.7	-2.3	2.5	0.9	0.1
				Wind -X ecc.+	7.1	-2.6	0.8	-1.9	0.5	-0.2	7.2	3.3	-0.7	-2.2	0.4	-0.0
				Wind -X ecc.-	5.9	-3.0	-2.3	-2.2	-1.6	-0.3	6.3	3.7	2.3	-2.5	-0.9	-0.1
				Wind +Y ecc.+	11.4	1.3	23.6	1.0	15.2	0.2	9.2	-1.8	-20.8	1.2	9.4	0.1
				Wind +Y ecc.-	5.8	-0.1	9.2	-0.1	5.5	-0.1	5.1	0.1	-6.9	-0.0	3.4	-0.1
				Wind -Y ecc.+	-11.4	-1.3	-23.6	-1.0	-15.2	-0.2	-9.2	1.8	20.8	-1.2	-9.4	-0.1
				Wind -Y ecc.-	-5.8	0.1	-9.2	0.1	-5.5	0.1	-5.1	-0.1	6.9	0.0	-3.4	0.1
				Earthquake X Mode 1	8.5	14.0	79.7	10.4	44.6	2.1	2.3	-18.0	-50.7	11.9	27.3	1.1
				Earthquake X Mode 2	120.8	-24.5	81.1	-17.9	45.5	-1.1	117.0	30.1	-51.0	-20.0	28.9	0.2
				Earthquake X Mode 3	3.3	0.8	8.9	0.6	4.7	-0.0	2.7	-1.1	-4.7	0.7	2.9	-0.1
				Earthquake X Mode 4	0.6	0.8	-0.8	0.6	5.2	0.1	-0.5	-1.1	-16.6	0.8	4.0	0.0
				Earthquake X Mode 5	-9.9	-2.1	0.8	-1.6	5.7	-0.1	-11.0	2.9	-16.1	-2.0	4.1	0.1
				Earthquake X Mode 6	-0.3	0.0	0.0	0.0	0.8	-0.0	-0.5	-0.0	-2.4	0.0	0.6	-0.0
				Earthquake X Mode 7	-0.3	-0.0	-3.8	-0.0	-0.2	-0.0	-0.5	0.0	-3.3	-0.0	-0.2	-0.0
				Earthquake X Mode 8	-0.3	-0.0	-2.6	-0.0	-0.1	-0.0	-0.4	0.0	-2.4	-0.0	-0.1	-0.0
				Earthquake X Mode 9	1.1	-0.1	4.9	-0.1	0.2	-0.0	1.4	0.1	4.6	-0.0	0.1	-0.0
				Earthquake Y Mode 1	3.8	6.4	36.2	4.7	20.3	0.9	1.0	-8.2	-23.0	5.4	12.4	0.5
				Earthquake Y Mode 2	37.3	-7.6	25.1	-5.5	14.1	-0.3	36.1	9.3	-15.8	-6.2	8.9	0.1
				Earthquake Y Mode 3	20.2	5.0	54.9	3.8	28.7	-0.2	16.8	-6.7	-28.7	4.6	17.7	-0.7
				Earthquake Y Mode 4	0.1	0.2	-0.2	0.1	1.0	0.0	-0.1	-0.2	-3.2	0.1	0.8	0.0
				Earthquake Y Mode 5	-1.8	-0.4	0.1	-0.3	1.0	-0.0	-2.0	0.5	-2.9	-0.4	0.7	0.0
				Earthquake Y Mode 6	-2.4	0.3	0.1	0.2	6.7	-0.0	-3.8	-0.4	-20.0	0.3	5.0	-0.1
				Earthquake Y Mode 7	-0.1	-0.0	-1.1	-0.0	-0.1	-0.0	-0.2	0.0	-1.0	-0.0	-0.0	-0.0
				Earthquake Y Mode 8	-0.8	-0.0	-6.5	-0.0	-0.2	-0.0	-1.1	0.0	-5.9	-0.0	-0.1	-0.0
				Earthquake Y Mode 9	0.4	-0.0	1.8	-0.0	0.1	-0.0	0.5	0.0	1.7	-0.0	0.0	-0.0
	Floor 1	30.0	0.00/3.00	Self weight	328.7	0.1	4.8	0.1	3.9	-0.1	308.8	-0.1	-9.8	-0.1	14.0	-0.1
				Dead load	131.9	0.1	-0.9	0.1	-2.5	-0.0	132.9	-0.2	4.9	0.1	3.0	-0.1
				Live load	75.7	0.1	3.4	0.1	3.1	-0.1	75.6	-0.1	-7.3	-0.1	6.4	-0.0
				Wind +X ecc.+	-11.4	1.8	-0.6	1.3	-0.4	0.1	-11.5	-2.1	0.5	1.4	-0.4	0.1
				Wind +X ecc.-	-9.7	2.0	10.5	1.4	3.6	0.2	-9.8	-2.4	0.1	1.6	2.9	0.1
				Wind -X ecc.+	11.4	-1.8	0.6	-1.3	0.4	-0.1	11.5	2.1	-0.5	-1.4	0.4	-0.1
				Wind -X ecc.-	9.7	-2.0	-10.5	-1.4	-3.6	-0.2	9.8	2.4	-0.1	-1.6	-2.9	-0.1
				Wind +Y ecc.+	16.8	0.6	77.3	0.5	27.2	0.1	17.4	-0.9	-2.0	0.6	22.6	0.1
				Wind +Y ecc.-	9.1	-0.3	25.8	-0.2	8.7	-0.1	9.4	0.2	0.3	-0.2	7.3	-0.1
				Wind -Y ecc.+	-16.8	-0.6	-77.3	-0.5	-27.2	-0.1	-17.4	0.9	2.0	-0.6	-22.6	-0.1
				Wind -Y ecc.-	-9.1	0.3	-25.8	0.2	-8.7	0.1	-9.4	-0.2	-0.3	0.2	-7.3	0.1
				Earthquake X Mode 1	8.7	8.1	216.5	6.0	71.2	1.3	10.5	-10.2	8.8	6.6	58.7	0.9
				Earthquake X Mode 2	175.0	-15.8	191.0	-11.0	64.5	-0.7	178.7	17.7	3.6	-11.7	54.9	-0.3
				Earthquake X Mode 3	4.7	0.3	20.4	0.3	6.4	-0.0	5.0	-0.5	1.9	0.3	5.2	-0.1
				Earthquake X Mode 4	-0.5	0.9	26.4	0.7	11.5	0.1	-0.8	-1.2	-7.6	0.8	9.6	0.1
				Earthquake X Mode 5	-1.9	-2.2	24.6	-1.6	11.0	-0.1	-2.2	2.7	-7.9	-1.8	9.0	0.0
				Earthquake X Mode 6	-0.2	0.0	3.7	0.0	1.6	-0.0	-0.2	-0.0	-1.0	0.0	1.3	-0.0
				Earthquake X Mode 7	-0.6	0.2	6.8	0.2	3.9	0.0	-0.8	-0.3	-4.9	0.2	3.3	-0.0
				Earthquake X Mode 8	-0.4	0.1	4.7	0.1	2.7	0.0	-0.6	-0.2	-3.4	0.1	2.3	-0.0
				Earthquake X Mode 9	-0.2	0.6	-9.3	0.4	-5.5	0.0	0.0	-0.8	6.8	0.5	-4.6	-0.1
				Earthquake Y Mode 1	3.9	3.7	98.2	2.7	32.3	0.6	4.8	-4.6	4.0	3.0	26.6	0.4
				Earthquake Y Mode 2	54.0	-4.9	59.0	-3.4	19.9	-0.2	55.2	5.5	1.1	-3.6	17.0	-0.1
				Earthquake Y Mode 3	28.9	2.1	125.6	1.7	39.1	-0.3	30.6	-3.0	11.9	2.0	32.3	-0.4
				Earthquake Y Mode 4	-0.1	0.2	5.1	0.1	2.2	0.0	-0.2	-0.2	-1.5	0.2	1.9	0.0
				Earthquake Y Mode 5	-0.4	-0.4	4.5	-0.3	2.0	-0.0	-0.4	0.5	-1.4	-0.3	1.6	0.0
				Earthquake Y Mode 6	-1.2	0.3	30.5	0.2	13.2	-0.0	-1.5	-0.4	-8.4	0.3	11.0	-0.1
				Earthquake Y Mode 7	-0.2	0.1	2.0	0.0	1.2	0.0	-0.3	-0.1	-1.5	0.1	1.0	-0.0
				Earthquake Y Mode 8	-1.1	0.3	11.7	0.2	6.8	0.0	-1.4	-0.4	-8.4	0.3	5.7	-0.0
				Earthquake Y Mode 9	-0.1	0.2	-3.4	0.2	-2.0	0.0	0.0	-0.3	2.5	0.2	-1.7	-0.0
W17	Floor 6	30.0	15.00/17.30	Self weight	35.9	3.8	-2.1	1.3	-4.9	-0.6	20.5	1.4	9.8	0.6	-6.5	0.3
				Dead load	-0.8	0.8	-4.0	0.2	-2.0	0.1	-0.9	0.4	0.6	0.3	-2.0	0.0
				Live load	3.8	-0.3	-0.0	-0.0	-0.7	-0.1	3.7	-0.1	1.7	-0.1	-1.0	0.1
				Wind +X ecc.+	1.4	-1.0	-0.2	0.3	-0.2	-0.0	1.6	-1.6	0.2	0.0	-0.2	-0.0
				Wind +X ecc.-	1.6	-0.9	-0.0	0.5	-0.0	0.0	1.8	-2.0	-0.1	0.1	0.1	-0.0
				Wind -X ecc.+	-1.4	1.0	0.2	-0.3	0.2	0.0	-1.6	1.6	-0.2	-0.0	0.2	0.0
				Wind -X ecc.-	-1.6	0.9	0.0	-0.5	0.0	-0.0	-1.8	2.0	0.1	-0.1	-0.1	0.0
				Wind +Y ecc.+	0.1	-1.8	1.1	-0.2	1.4	0.1	0.3	-1.3	-2.2	-0.3	1.7	-0.1
				Wind +Y ecc.-	-0.1	-0.0	0.7	0.2	0.7	0.0	-0.1	-0.4	-1.1	0.2	0.9	-0.1
				Wind -Y ecc.+	-0.1	1.8	-1.1	0.2	-1.4	-0.1	-0.3	1.3	2.2	0.3	-1.7	0.1
				Wind -Y ecc.-	0.1	0.0	-0.7	-0.2	-0.7	-0.0	0.1	0.4	1.1	-0.2	-0.9	0.1
				Earthquake X Mode 1	4.1	-18.1	2.7	-4.5	3.7	0.3	5.4	-8.3	-6.4	-5.0	4.9	-0.3
				Earthquake X Mode 2	-16.9	13.9	5.0	-1.0	5.8	0.4	-18.5	15.7	-8.6	1.9	6.6	-0.1
				Earthquake X Mode 3	0.4	-1.4	0.2	-0.3	0.3	-0.0	0.5	-0.7	-0.6	0.4	0.4	-0.1
				Earthquake X Mode 4	-1.0	2.9	-0.8	0.4	-1.0	-0.1	-1.2	2.0	1.6	0.6	-1.3	0.0
				Earthquake X Mode 5	5.2	-3.4	-1.3	0.8	-1.4	-0.1	5.7	-5.2	2.0	-0.1	-1.6	-0.0
				Earthquake X Mode 6	-0.0	0.1	-0.1	0.0	-0.1	-0.0	-0.0	0.1	0.2	0.0	-0.2	0.0
				Earthquake X Mode 7	0.3	-0.1	0.3	0.2	0.3	0.1	0.4	-0.7	-0.5	0.1	0.4	0.0
				Earthquake X Mode 8	0.3	0.2	0.2	0.3	0.2	0.0	0.3	-0.5	-0.4	0.2	0.3	-0.0
				Earthquake X Mode 9	2.0	-0.2	-0.7	0.7	-0.7	-0.1	2.1	-1.9	0.9	0.4	-0.7	-0.0
				Earthquake Y Mode 1	1.9	-8.2	1.2	-2.0	1.7	0.2	2.5	-3.8	-2.9	-2.3	2.2	-0.1
				Earthquake Y Mode 2	-5.2	4.3	1.5	-0.3	1.8	0.1	-5.7	4.9	-2.7	0.6	2.0	-



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	techo	30.0	12.00/15.00	Self weight	95.8	-9.6	2.5	-6.4	2.0	-0.6	74.3	9.3	-3.4	-5.5	1.4	-2.1				
				Dead load	42.7	-2.6	-1.3	-2.3	-2.0	-0.2	41.1	4.8	5.7	-1.1	-4.6	-1.2				
				Live load	13.8	-3.8	1.7	-2.7	1.1	-0.2	13.6	4.0	-1.6	-2.0	1.1	-0.5				
				Wind +X ecc.+	2.3	0.7	-0.2	2.1	-0.1	-0.0	2.0	-5.4	0.2	1.0	-0.2	-0.0				
				Wind +X ecc.-	2.3	0.5	-0.0	2.2	0.0	0.0	2.0	-5.7	-0.1	1.0	0.1	0.0				
				Wind -X ecc.+	-2.3	-0.7	0.2	-2.1	0.1	0.0	-2.0	5.4	-0.2	-1.0	0.2	0.0				
				Wind -X ecc.-	-2.3	-0.5	0.0	-2.2	-0.0	-0.0	-2.0	5.7	0.1	-1.0	-0.1	-0.0				
				Wind +Y ecc.+	-1.2	-0.8	1.4	0.4	1.3	0.2	-1.2	-1.9	-2.7	0.2	2.2	0.5				
				Wind +Y ecc.-	-0.8	-0.3	0.5	-0.4	0.4	0.0	-0.7	0.7	-0.9	-0.2	0.7	0.1				
				Wind -Y ecc.+	1.2	0.8	-1.4	-0.4	-1.3	-0.2	1.2	1.9	2.7	-0.2	-2.2	-0.5				
				Wind -Y ecc.-	0.8	0.3	-0.5	0.4	-0.4	-0.0	0.7	-0.7	0.9	0.2	-0.7	-0.1				
				Earthquake X Mode 1	2.9	2.6	5.0	13.6	4.6	1.0	1.2	-36.4	-10.0	7.5	8.1	1.9				
				Earthquake X Mode 2	-34.3	-21.8	7.9	-34.4	6.6	1.3	-29.1	77.4	-13.2	-18.8	10.4	2.3				
				Earthquake X Mode 3	0.2	0.3	0.4	0.9	0.4	0.0	0.1	-2.4	-0.9	0.5	0.7	0.1				
				Earthquake X Mode 4	-0.6	-3.5	-1.2	-3.8	-1.0	-0.2	-0.3	7.4	2.0	-2.4	-1.7	-0.4				
				Earthquake X Mode 5	10.0	14.7	-1.8	13.2	-1.4	-0.3	8.5	-23.3	2.6	8.2	-2.1	-0.4				
				Earthquake X Mode 6	0.2	-0.0	-0.2	-0.1	-0.1	-0.0	0.2	0.1	0.3	-0.0	-0.2	-0.0				
				Earthquake X Mode 7	0.3	2.2	0.4	1.2	0.2	0.0	0.2	-1.5	-0.4	0.9	0.4	0.1				
				Earthquake X Mode 8	0.1	1.1	0.2	0.5	0.1	0.0	0.1	-0.5	-0.2	0.4	0.2	0.0				
				Earthquake X Mode 9	3.5	7.5	-0.6	4.8	-0.4	-0.1	3.1	-6.5	0.7	3.3	-0.6	-0.1				
				Earthquake Y Mode 1	1.3	1.2	2.3	6.2	2.1	0.4	0.5	-16.5	-4.5	3.4	3.7	0.9				
				Earthquake Y Mode 2	-10.6	-6.7	2.5	-10.6	2.1	0.4	-9.0	23.9	-4.1	-5.8	3.2	0.7				
				Earthquake Y Mode 3	1.4	1.6	2.7	5.7	2.5	0.1	0.8	-14.7	-5.4	3.2	4.4	0.4				
				Earthquake Y Mode 4	-0.1	-0.7	-0.2	-0.7	-0.2	-0.0	-0.0	1.4	0.4	-0.5	-0.3	-0.1				
				Earthquake Y Mode 5	1.8	2.7	-0.3	2.4	-0.3	-0.0	1.5	-4.2	0.5	1.5	-0.4	-0.1				
				Earthquake Y Mode 6	1.4	-0.3	-1.4	-0.5	-1.1	-0.1	1.3	1.1	2.2	-0.3	-1.8	-0.3				
				Earthquake Y Mode 7	0.1	0.7	0.1	0.4	0.1	0.0	0.1	-0.4	-0.1	0.3	0.1	0.0				
				Earthquake Y Mode 8	0.3	2.8	0.6	1.3	0.4	0.0	0.2	-1.1	-0.6	1.0	0.6	0.1				
				Earthquake Y Mode 9	1.3	2.8	-0.2	1.8	-0.2	-0.0	1.1	-2.4	0.3	1.2	-0.2	-0.0				
					Floor 4	30.0	9.00/12.00	Self weight	156.5	-11.4	2.0	-9.7	1.6	-0.8	133.7	17.3	-2.7	-6.1	1.5	-1.3
								Dead load	58.1	-4.3	0.9	-3.8	0.8	-0.1	55.7	7.3	-1.8	-2.8	1.4	-0.1
								Live load	29.0	-4.1	2.1	-3.2	1.6	-0.4	28.5	5.3	-3.0	-2.1	2.0	-0.7
								Wind +X ecc.+	2.7	2.2	-0.3	3.4	-0.2	-0.1	2.5	-7.7	0.4	1.7	-0.3	-0.1
Wind +X ecc.-	2.7	1.9	0.0					3.3	0.0	-0.0	2.5	-7.8	-0.1	1.6	0.1	0.0				
Wind -X ecc.+	-2.7	-2.2	0.3					-3.4	0.2	0.1	-2.5	7.7	-0.4	-1.7	0.3	0.1				
Wind -X ecc.-	-2.7	-1.9	-0.0					-3.3	-0.0	0.0	-2.5	7.8	0.1	-1.6	-0.1	-0.0				
Wind +Y ecc.+	-1.4	-2.6	2.1					-1.6	1.7	0.3	-1.1	2.2	-3.4	-1.4	2.6	0.5				
Wind +Y ecc.-	-1.0	-1.2	0.8					-1.2	0.6	0.1	-0.8	2.4	-1.2	-0.8	0.9	0.1				
Wind -Y ecc.+	1.4	2.6	-2.1					1.6	-1.7	-0.3	1.1	-2.2	3.4	1.4	-2.6	-0.5				
Wind -Y ecc.-	1.0	1.2	-0.8					1.2	-0.6	-0.1	0.8	-2.4	1.2	0.8	-0.9	-0.1				
Earthquake X Mode 1	4.4	2.7	6.8					8.9	5.7	1.3	4.5	-23.4	-11.0	2.6	8.4	2.1				
Earthquake X Mode 2	-40.4	-46.4	10.4					-51.0	8.2	2.2	-36.5	103.4	-15.3	-27.4	12.3	2.9				
Earthquake X Mode 3	0.2	-0.1	0.7					0.2	0.5	0.0	0.3	-0.6	-1.0	-0.1	0.8	0.1				
Earthquake X Mode 4	-0.5	-5.5	-1.3					-2.2	-0.8	-0.2	-0.6	1.2	1.2	-1.3	-1.1	-0.3				
Earthquake X Mode 5	10.8	18.5	-1.6					9.9	-1.1	-0.3	10.0	-11.1	1.9	5.9	-1.6	-0.4				
Earthquake X Mode 6	0.2	-0.1	-0.2					0.1	-0.1	-0.0	0.2	-0.3	0.2	0.0	-0.2	-0.0				
Earthquake X Mode 7	0.1	1.1	0.0					-0.3	-0.0	-0.0	0.2	1.7	0.2	-0.1	-0.1	0.0				
Earthquake X Mode 8	-0.0	0.5	0.0					-0.2	-0.0	0.0	0.0	1.0	0.1	-0.1	-0.1	0.0				
Earthquake X Mode 9	3.2	2.1	-0.0					-1.0	0.1	-0.0	3.1	4.6	-0.2	-0.7	0.1	-0.0				
Earthquake Y Mode 1	2.0	1.2	3.1					4.0	2.6	0.6	2.0	-10.6	-5.0	1.2	3.8	0.9				
Earthquake Y Mode 2	-12.5	-14.3	3.2					-15.7	2.5	0.7	-11.3	31.9	-4.7	-8.5	3.8	0.9				
Earthquake Y Mode 3	1.3	-0.5	4.1					1.0	3.4	0.1	1.6	-3.6	-6.4	-0.7	4.9	0.4				
Earthquake Y Mode 4	-0.1	-1.1	-0.2					-0.4	-0.2	-0.0	-0.1	0.2	0.2	-0.3	-0.2	-0.1				
Earthquake Y Mode 5	2.0	3.4	-0.3					1.8	-0.2	-0.1	1.8	-2.0	0.3	1.1	-0.3	-0.1				
Earthquake Y Mode 6	1.9	-0.7	-1.4					0.5	-0.9	-0.1	1.7	-2.1	1.4	0.3	-1.3	-0.2				
Earthquake Y Mode 7	0.0	0.3	0.0					-0.1	-0.0	-0.0	0.0	0.5	0.1	-0.0	-0.0	0.0				
Earthquake Y Mode 8	-0.1	1.3	0.1					-0.5	-0.1	0.0	0.0	2.6	0.3	-0.3	-0.2	0.0				
Earthquake Y Mode 9	1.2	0.8	-0.0					-0.4	0.0	-0.0	1.1	1.7	-0.1	-0.3	0.0	-0.0				
	Floor 3	30.0	6.00/9.00					Self weight	215.5	-9.1	2.0	-7.4	1.6	-0.8	191.3	13.0	-2.9	-4.5	1.6	-1.3
								Dead load	76.9	-3.4	0.5	-2.9	0.3	-0.1	73.9	5.5	-0.6	-2.1	0.6	-0.1
								Live load	43.9	-3.5	1.9	-2.8	1.5	-0.4	43.1	4.7	-2.6	-1.7	1.7	-0.6
								Wind +X ecc.+	3.6	5.4	-0.3	5.4	-0.2	-0.1	3.2	-10.6	0.4	2.9	-0.4	-0.1
				Wind +X ecc.-	3.5	5.1	0.1	5.4	0.1	-0.0	3.2	-10.7	-0.2	2.8	0.1	0.0				
				Wind -X ecc.+	-3.6	-5.4	0.3	-5.4	0.2	0.1	-3.2	10.6	-0.4	-2.9	0.4	0.1				
				Wind -X ecc.-	-3.5	-5.1	-0.1	-5.4	-0.1	0.0	-3.2	10.7	0.2	-2.8	-0.1	-0.0				
				Wind +Y ecc.+	-2.1	-3.0	2.9	-2.1	2.4	0.4	-1.7	3.2	-4.4	-1.5	3.4	0.7				
				Wind +Y ecc.-	-1.5	-1.9	1.0	-1.9	0.8	0.1	-1.3	3.5	-1.5	-1.1	1.2	0.1				
				Wind -Y ecc.+	2.1	3.0	-2.9	2.1	-2.4	-0.4	1.7	-3.2	4.4	1.5	-3.4	-0.7				
				Wind -Y ecc.-	1.5	1.9	-1.0	1.9	-0.8	-0.1	1.3	-3.5	1.5	1.1	-1.2	-0.1				
				Earthquake X Mode 1	6.4	14.8	9.3	15.5	7.3	1.5	6.4	-30.5	-13.4	7.2	10.5	2.6				
				Earthquake X Mode 2	-53.0	-81.7	12.9	-71.3	9.9	2.6	-47.5	128.5	-18.1	-39.6	14.8	3.5				
				Earthquake X Mode 3	0.0	0.4	0.9	0.3	0.7	0.0	0.1	-0.5	-1.2	0.0	1.0	0.1				
				Earthquake X Mode 4	-0.5	-4.8	-0.5	-0.5	-0.2	-0.0	-0.5	-3.1	-0.1	-0.4	-0.1	-0.1				
				Earthquake X Mode 5	10.7	11.0	-0.5	1.3	-0.2	-0.1	10.3	6.2	0.2	0.7	-0.3	-0.2				
				Earthquake X Mode 6	0.3	-0.1	-0.1	0.0	-0.0	-0.0	0.2	-0.2	-0.0	0.0	-0.0	-0.0				
				Earthquake X Mode 7	-0.0	-1.8	-0.3	-1.3	-0.2	-0.0	-0.0	2.0	0.4	-0.9	-0.4	-0.1				
				Earthquake X Mode 8	-0.1	-1.0	-0.2	-0.7	-0.2	-0.0	-0.1	1.0	0.3	-0.5	-0.2	-0.0				
				Earthquake X Mode 9	2.1	-6.6	0.5	-5.0	0.4	0.1	2.3	7.7	-0.7	-3.3	0.6	0.1				
				Earthquake Y Mode 1	2.9	6.7	4.2	7.0	3.3	0.7	2.9	-13.9	-6.1	3.3	4.8	1.2				
				Earthquake Y Mode 2	-16.4	-25.2	4.0	-22.0	3.1	0.8	-14.7	39.7	-5.6	-12.2	4.6	1.1				
				Earthquake Y Mode 3	0.1	2.2	5.4	1.9	4.2	0.1	0.7	-3.2	-7.6	0.2	6.1	0.5				
				Earthquake Y Mode 4	-0.1	-0.9	-0.1	-0.1	-0.0	-0.0	-0.1	-0.6	-0.0	-0.1	-0.0	-0.0				
				Earthquake Y Mode 5	1.9	2.0	-0.1	0.2	-0.0	-0.0	1.9	1.1	0.0	0.1	-0.1	-0.0				
				Earthquake Y Mode 6	2.2	-1.2	-0.6	0.3	-0.2	-0.0	2.0	-2.0	-0.1	0.1	-0.1	-0.1				
				Earthquake Y Mode 7	-0.0	-0.5	-0.1	-0.4	-0.1	-0.0	-0.0	0.6	0.1	-0.3	-0.1	-0.0				
				Earthquake Y Mode 8	-0.2	-2.4	-0.5	-1.7	-0.4	-0.0	-0.2	2.4	0.7	-1.2	-0.6	-0.0				
				Earthquake Y Mode 9	0.8	-2.4	0.2	-1.8	0.1	0.0	0.8	2.8	-0.3	-1.2	0.2	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head								
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)			
	Floor 2	30.0	3.00/6.00	Self weight	272.9	-6.2	2.0	-5.8	1.6	-0.8	247.4	11.1	-2.7	-3.4	1.6	-1.2			
				Dead load	95.6	-3.0	0.5	-2.6	0.4	-0.1	92.2	5.2	-0.7	-2.0	0.6	-0.1			
				Live load	57.6	-2.0	2.0	-1.9	1.5	-0.4	56.4	3.4	-2.6	-1.0	1.8	-0.6			
				Wind +X ecc.+	4.9	9.6	-0.3	7.1	-0.3	-0.1	4.4	-11.2	0.5	4.0	-0.4	-0.1			
				Wind +X ecc.-	4.7	9.6	0.2	7.0	0.1	-0.0	4.4	-11.1	-0.2	3.9	0.1	0.0			
				Wind -X ecc.+	-4.9	-9.6	0.3	-7.1	0.3	0.1	-4.4	11.2	-0.5	-4.0	0.4	0.1			
				Wind -X ecc.-	-4.7	-9.6	-0.2	-7.0	-0.1	0.0	-4.4	11.1	0.2	-3.9	-0.1	-0.0			
				Wind +Y ecc.+	-3.4	-2.7	3.6	-2.5	2.7	0.5	-2.8	4.8	-4.7	-1.7	3.8	0.8			
				Wind +Y ecc.-	-2.5	-2.7	1.2	-2.4	0.9	0.0	-2.1	4.4	-1.5	-1.4	1.3	0.1			
				Wind -Y ecc.+	3.4	2.7	-3.6	2.5	-2.7	-0.5	2.8	-4.8	4.7	1.7	-3.8	-0.8			
				Wind -Y ecc.-	2.5	2.7	-1.2	2.4	-0.9	-0.0	2.1	-4.4	1.5	1.4	-1.3	-0.1			
				Earthquake X Mode 1	8.3	30.1	10.7	18.4	7.7	1.6	8.4	-24.2	-13.1	9.7	10.8	2.8			
				Earthquake X Mode 2	-70.7	-117.8	13.7	-81.2	10.1	2.7	-64.1	122.9	-17.6	-46.4	14.8	3.6			
				Earthquake X Mode 3	-0.3	1.1	1.0	0.3	0.7	0.0	-0.2	0.2	-1.2	0.1	1.0	0.1			
				Earthquake X Mode 4	-0.3	0.2	0.6	2.2	0.6	0.1	-0.3	-6.1	-1.3	1.4	0.9	0.1			
				Earthquake X Mode 5	9.1	-6.1	0.9	-9.3	0.8	0.2	9.3	20.3	-1.5	-5.8	1.2	0.1			
				Earthquake X Mode 6	0.2	-0.1	0.1	0.0	0.1	0.0	0.2	-0.1	-0.2	0.0	0.1	0.0			
				Earthquake X Mode 7	-0.1	-1.5	-0.1	-0.1	-0.0	-0.0	-0.1	-1.0	-0.1	-0.1	-0.0	-0.0			
				Earthquake X Mode 8	-0.1	-0.7	-0.1	0.0	-0.0	-0.0	-0.1	-0.6	-0.0	-0.0	-0.0	-0.0			
				Earthquake X Mode 9	1.4	-3.6	0.1	-0.4	0.0	0.0	1.5	-2.0	0.1	-0.2	0.0	0.1			
				Earthquake Y Mode 1	3.8	13.6	4.9	8.3	3.5	0.7	3.8	-11.0	-5.9	4.4	4.9	1.2			
				Earthquake Y Mode 2	-21.8	-36.4	4.2	-25.1	3.1	0.8	-19.8	38.0	-5.4	-14.3	4.6	1.1			
				Earthquake Y Mode 3	-2.1	6.6	6.1	1.7	4.3	0.0	-1.3	1.4	-7.1	0.6	6.0	0.5			
				Earthquake Y Mode 4	-0.0	0.0	0.1	0.4	0.1	0.0	-0.1	-1.2	-0.2	0.3	0.2	0.0			
				Earthquake Y Mode 5	1.7	-1.1	0.2	-1.7	0.1	0.0	1.7	3.7	-0.3	-1.1	0.2	0.0			
				Earthquake Y Mode 6	2.0	-0.5	0.7	0.1	0.7	0.0	1.9	-0.7	-1.5	0.0	1.1	0.1			
				Earthquake Y Mode 7	-0.0	-0.4	-0.0	-0.0	-0.0	-0.0	-0.0	-0.3	-0.0	-0.0	-0.0	-0.0			
				Earthquake Y Mode 8	-0.2	-1.7	-0.2	0.0	-0.0	-0.0	-0.2	-1.6	-0.1	-0.0	-0.0	-0.0			
				Earthquake Y Mode 9	0.5	-1.3	0.0	-0.2	0.0	0.0	0.5	-0.7	0.0	-0.1	0.0	0.0			
				Floor 1	30.0	0.00/3.00	Self weight	326.6	-1.7	0.9	-2.6	1.0	-0.6	299.7	6.2	-2.0	-1.4	0.8	-1.0
							Dead load	112.9	-1.6	0.2	-1.7	0.2	-0.1	109.1	4.1	-0.4	-1.3	0.3	-0.1
							Live load	68.8	-0.2	0.9	-0.5	0.9	-0.3	67.3	1.2	-2.0	-0.2	1.0	-0.5
							Wind +X ecc.+	6.3	19.9	-0.2	8.9	-0.2	-0.1	5.9	-6.4	0.3	6.0	-0.3	-0.1
							Wind +X ecc.-	6.1	21.3	0.4	9.3	0.2	-0.0	5.7	-6.1	-0.1	6.3	0.2	0.0
							Wind -X ecc.+	-6.3	-19.9	0.2	-8.9	0.2	0.1	-5.9	6.4	-0.3	-6.0	0.3	0.1
							Wind -X ecc.-	-6.1	-21.3	-0.4	-9.3	-0.2	0.0	-5.7	6.1	0.1	-6.3	-0.2	-0.0
	Wind +Y ecc.+	-5.0	0.9				4.0	-1.4	2.3	0.3	-4.4	5.3	-3.0	-0.6	3.0	0.6			
	Wind +Y ecc.-	-3.6	-5.5				1.2	-3.2	0.7	0.0	-3.3	4.0	-0.9	-2.1	0.9	0.1			
	Wind -Y ecc.+	5.0	-0.9				-4.0	1.4	-2.3	-0.3	4.4	-5.3	3.0	0.6	-3.0	-0.6			
	Wind -Y ecc.-	3.6	5.5				-1.2	3.2	-0.7	-0.0	3.3	-4.0	0.9	2.1	-0.9	-0.1			
	Earthquake X Mode 1	9.5	73.9				11.4	26.6	6.2	1.0	9.9	-4.7	-7.6	19.1	8.0	2.0			
	Earthquake X Mode 2	-88.4	-185.9				11.4	-83.3	7.1	1.8	-82.7	62.2	-10.5	-54.7	10.0	2.5			
	Earthquake X Mode 3	-0.8	1.8				0.9	0.1	0.5	-0.0	-0.7	1.4	-0.6	0.1	0.6	0.1			
	Earthquake X Mode 4	-0.0	9.6				1.4	4.5	0.8	0.1	-0.0	-3.5	-1.2	3.3	1.1	0.2			
	Earthquake X Mode 5	6.6	-26.7				1.4	-14.5	1.0	0.2	7.0	15.5	-1.5	-9.8	1.4	0.2			
Earthquake X Mode 6	0.2	0.2	0.2				0.0	0.1	0.0	0.2	0.2	-0.2	0.0	0.1	0.0				
Earthquake X Mode 7	-0.0	2.7	0.3				1.6	0.2	0.0	-0.0	-2.0	-0.4	1.2	0.3	0.0				
Earthquake X Mode 8	-0.1	1.4	0.2				0.8	0.1	0.0	-0.1	-0.9	-0.2	0.6	0.2	0.0				
Earthquake X Mode 9	1.7	8.1	-0.5				5.3	-0.4	-0.0	1.6	-7.0	0.6	3.8	-0.5	-0.0				
Earthquake Y Mode 1	4.3	33.5	5.2				12.1	2.8	0.5	4.5	-2.1	-3.5	8.7	3.6	0.9				
Earthquake Y Mode 2	-27.3	-57.4	3.5				-25.7	2.2	0.5	-25.5	19.2	-3.3	-16.9	3.1	0.8				
Earthquake Y Mode 3	-5.1	11.3	5.6				0.7	3.0	-0.0	-4.2	8.8	-3.6	0.8	3.9	0.4				
Earthquake Y Mode 4	-0.0	1.8	0.3				0.9	0.2	0.0	-0.0	-0.7	-0.2	0.6	0.2	0.0				
Earthquake Y Mode 5	1.2	-4.9	0.3				-2.6	0.2	0.0	1.3	2.8	-0.3	-1.8	0.2	0.0				
Earthquake Y Mode 6	1.3	1.5	1.5				0.0	0.9	0.1	1.4	1.4	-1.3	0.2	1.2	0.1				
Earthquake Y Mode 7	-0.0	0.8	0.1				0.5	0.1	0.0	-0.0	-0.6	-0.1	0.4	0.1	0.0				
Earthquake Y Mode 8	-0.2	3.4	0.5				2.0	0.4	0.0	-0.2	-2.3	-0.6	1.5	0.5	0.0				
Earthquake Y Mode 9	0.6	3.0	-0.2				1.9	-0.1	-0.0	0.6	-2.6	0.2	1.4	-0.2	-0.0				
W19	techo	30.0	12.00/15.00	Self weight	125.7	7.4	7.4	5.8	6.0	-0.4	91.5	-10.5	-13.8	7.6	7.5	0.9			
				Dead load	58.4	2.6	4.7	3.0	-8.2	-0.6	55.8	-6.1	26.3	3.1	-3.0	0.4	0.4		
				Live load	32.4	4.0	1.4	3.0	6.8	-0.2	31.2	-5.5	-19.0	4.1	5.2	0.4	0.4		
				Wind +X ecc.+	-1.4	1.6	1.0	1.3	0.9	0.0	-1.4	-2.5	-1.5	1.8	0.6	0.2	0.2		
				Wind +X ecc.-	-2.1	2.0	-1.8	1.6	0.7	0.1	-2.1	-3.0	-3.6	2.2	0.0	0.3	0.3		
				Wind -X ecc.+	1.4	-1.6	-1.0	-1.3	-0.9	-0.0	1.4	2.5	1.5	-1.8	-0.6	-0.2	-0.2		
				Wind -X ecc.-	2.1	-2.0	1.8	-1.6	-0.7	-0.1	2.1	-3.0	3.6	-2.2	-0.0	-0.3	-0.3		
				Wind +Y ecc.+	-4.4	2.2	-20.0	1.7	-0.7	0.1	-4.2	-3.2	-17.5	2.4	-3.8	0.3	0.3		
				Wind +Y ecc.-	-1.2	0.6	-6.8	0.5	0.4	-0.1	-1.2	-0.8	-7.9	0.6	-1.0	-0.0	-0.0		
				Wind -Y ecc.+	4.4	-2.2	20.0	-1.7	0.7	-0.1	4.2	3.2	17.5	-2.4	3.8	-0.3	-0.3		
				Wind -Y ecc.-	1.2	-0.6	6.8	-0.5	-0.4	0.1	1.2	0.8	7.9	-0.6	1.0	0.0	0.0		
				Earthquake X Mode 1	-14.6	14.9	-52.1	11.6	8.2	1.1	-14.2	-21.8	-73.8	16.5	-5.0	3.0	3.0		
				Earthquake X Mode 2	13.3	-14.5	-57.0	-11.8	-3.1	0.3	13.3	22.9	-47.1	-17.0	-11.5	-1.9	-1.9		
				Earthquake X Mode 3	-1.4	1.2	-6.8	0.9	0.8	-0.1	-1.3	-1.7	-8.8	1.3	-0.8	0.0	0.0		
				Earthquake X Mode 4	-6.6	-2.9	-18.5	-2.2	-15.1	-0.3	-6.2	4.2	24.9	-3.2	-10.4	-0.6	-0.6		
				Earthquake X Mode 5	-12.0	3.6	-16.7	2.8	-12.6	-0.1	-11.5	-5.1	19.7	3.9	-8.9	0.4	0.4		
				Earthquake X Mode 6	-1.2	-0.2	-2.8	-0.2	-2.3	0.0	-1.2	0.3	3.9	-0.3	-1.6	-0.0	-0.0		
				Earthquake X Mode 7	2.6	0.6	13.7	0.5	6.9	0.1	2.4	-0.9	-6.4	0.7	5.5	0.1	0.1		
				Earthquake X Mode 8	2.2	0.4	10.9	0.3	5.6	0.0	2.0	-0.5	-5.2	0.4	4.4	0.0	0.0		
				Earthquake X Mode 9	-5.4	0.9	-20.2	0.7	-9.9	-0.0	-5.1	-1.1	8.5	0.9	-8.0	0.1	0.1		
				Earthquake Y Mode 1	-6.6	6.8	-23.6	5.3	3.7	0.5	-6.4	-9.9	-33.5	7.5	-2.3	1.3	1.3		
				Earthquake Y Mode 2	4.1	-4.5	-17.6	-3.6	-1.0	0.1	4.1	7.1	-14.5	-5.2	-3.5	-0.6	-0.6		
				Earthquake Y Mode 3	-8.6	7.5	-42.1	5.8	4.7	-0.5	-8.2	-10.7	-54.2	8.1	-5.0	0.1	0.1		
				Earthquake Y Mode 4	-1.3	-0.6	-3.6	-0.4	-2.9	-0.0	-1.2	0.8	4.8	-0.6	-2.0	-0.1	-0.1		
				Earthquake Y Mode 5	-2.2	0.6	-3.0	0.5	-2.3	-0.0	-2.1	-0.9	3.6	0.7	-1.6	0.1	0.1		
				Earthquake Y Mode 6	-10.0	-1.9	-22.8	-1.5	-19.0	0.0	-9.5	2.8	31.9	-2.1	-13.1	-0.1	-0.1		
				Earthquake Y Mode 7	0.8	0.2	4.1	0.1	2.1	0.0	0.7	-0.3	-1.9	0.2	1.7	0.0	0.0		
				Earthquake Y Mode 8	5.4	0.9	27.3	0.7	13.9	0.0	5.0	-1.3	-12.9	1.0	11.1	0.1	0.1		
				Earthquake Y Mode 9	-2.0	0.3	-7.4	0.2	-3.6	-0.0	-1.9	-0.4	3.1	0.3	-2.9	0.0	0.0		



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head									
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)				
	Floor 4	30.0	9.00/12.00	Self weight	270.5	6.7	-3.2	5.2	1.6	-0.5	238.6	-9.2	-10.2	6.6	3.4	1.1				
				Dead load	80.5	-0.5	4.6	-0.4	0.9	0.1	80.9	0.9	2.3	-0.5	1.0	0.5				
				Live load	85.0	3.8	-2.1	2.9	0.1	-0.5	84.3	-5.1	-3.9	3.6	1.4	0.3				
				Wind +X ecc.+	-3.1	2.1	0.9	1.6	0.6	0.1	-3.1	-3.1	-0.9	2.4	0.4	0.4				
				Wind +X ecc.-	-3.2	2.5	-0.2	2.0	2.8	0.1	-3.4	-3.7	-8.5	2.9	1.7	0.5				
				Wind -X ecc.+	3.1	-2.1	-0.9	-1.6	-0.6	-0.1	3.1	3.1	0.9	-2.4	-0.4	-0.4				
				Wind -X ecc.-	3.2	-2.5	0.2	-2.0	-2.8	-0.1	3.4	3.7	8.5	-2.9	-1.7	-0.5				
				Wind +Y ecc.+	0.7	2.7	-6.0	2.0	17.4	0.2	-0.0	-3.7	-57.7	3.0	9.9	0.5				
				Wind +Y ecc.-	1.4	0.6	-1.0	0.4	7.3	-0.1	1.2	-0.8	-22.6	0.6	4.2	-0.1				
				Wind -Y ecc.+	-0.7	-2.7	6.0	-2.0	-17.4	-0.2	0.0	3.7	57.7	-3.0	-9.9	-0.5				
				Wind -Y ecc.-	-1.4	-0.6	1.0	-0.4	-7.3	0.1	-1.2	0.8	22.6	-0.6	-4.2	0.1				
				Earthquake X Mode 1	1.2	18.4	9.5	13.9	68.9	1.7	-1.5	-26.2	-194.0	20.9	41.8	4.3				
				Earthquake X Mode 2	56.4	-18.5	2.6	-14.5	54.1	0.3	54.5	27.7	-157.1	-21.2	32.6	-2.9				
				Earthquake X Mode 3	1.2	1.4	1.9	1.1	8.8	-0.1	0.9	-2.0	-24.0	1.6	5.4	0.0				
				Earthquake X Mode 4	-15.5	-2.3	-41.4	-1.7	-17.5	-0.3	-15.2	3.3	9.3	-2.7	-13.5	-0.6				
				Earthquake X Mode 5	-24.9	3.1	-37.4	2.1	-14.5	-0.0	-24.7	-3.7	4.3	3.1	-11.3	0.5				
				Earthquake X Mode 6	-2.8	-0.2	-6.7	-0.1	-2.9	0.0	-2.8	0.3	1.6	-0.2	-2.2	-0.0				
				Earthquake X Mode 7	3.2	-0.0	6.9	-0.0	-1.6	-0.0	3.2	0.1	11.8	-0.0	-1.0	0.0				
				Earthquake X Mode 8	2.7	-0.0	5.5	-0.0	-1.2	-0.0	2.8	0.0	9.4	-0.0	-0.8	0.0				
				Earthquake X Mode 9	-6.8	0.0	-9.5	-0.1	2.8	0.0	-6.9	0.3	-18.2	-0.2	1.9	0.1				
				Earthquake Y Mode 1	0.6	8.3	4.3	6.3	31.3	0.8	-0.7	-11.9	-88.0	9.5	19.0	2.0				
				Earthquake Y Mode 2	17.4	-5.7	0.8	-4.5	16.7	0.1	16.8	8.6	-48.5	-6.6	10.1	-0.9				
				Earthquake Y Mode 3	7.3	8.7	12.0	6.5	54.2	-0.5	5.4	-12.1	-147.9	9.7	33.5	0.1				
				Earthquake Y Mode 4	-3.0	-0.4	-8.0	-0.3	-3.4	-0.0	-2.9	0.6	1.8	-0.5	-2.6	-0.1				
				Earthquake Y Mode 5	-4.5	0.6	-6.8	0.4	-2.6	-0.0	-4.5	-0.7	0.8	0.6	-2.1	0.1				
				Earthquake Y Mode 6	-23.2	-1.4	-55.1	-1.1	-23.6	0.0	-22.9	2.1	13.1	-1.6	-18.2	-0.1				
				Earthquake Y Mode 7	0.9	-0.0	2.1	-0.0	-0.5	-0.0	1.0	0.0	3.5	-0.0	-0.3	0.0				
				Earthquake Y Mode 8	6.7	-0.1	13.8	-0.1	-3.1	-0.0	6.9	0.1	23.4	-0.1	-2.0	0.0				
				Earthquake Y Mode 9	-2.5	0.0	-3.5	-0.0	1.0	0.0	-2.5	0.1	-6.6	-0.1	0.7	0.0				
					Floor 3	30.0	6.00/9.00	Self weight	404.3	6.0	-7.1	4.7	0.1	-0.5	374.8	-8.4	-9.8	5.9	2.4	0.9
								Dead load	104.2	-0.3	2.4	-0.2	-0.5	0.0	105.0	0.4	4.0	-0.3	-0.1	0.2
								Live load	136.5	3.4	-4.4	2.6	-0.2	-0.5	136.6	-4.7	-5.2	3.2	1.1	0.2
								Wind +X ecc.+	-5.2	2.7	0.8	2.1	0.7	0.1	-5.3	-3.9	-1.2	3.1	0.5	0.5
Wind +X ecc.-	-2.8	3.3	3.4					2.5	4.8	0.2	-3.0	-4.7	-10.8	3.7	3.1	0.7				
Wind -X ecc.+	5.2	-2.7	-0.8					-2.1	-0.7	-0.1	5.3	3.9	1.2	-3.1	-0.5	-0.5				
Wind -X ecc.-	2.8	-3.3	-3.4					-2.5	-4.8	-0.2	3.0	4.7	10.8	-3.7	-3.1	-0.7				
Wind +Y ecc.+	21.0	3.2	20.9					2.4	31.4	0.3	19.9	-4.5	-71.5	3.7	20.2	0.6				
Wind +Y ecc.-	10.0	0.6	9.5					0.4	12.5	-0.1	9.6	-0.8	-27.2	0.7	8.0	-0.2				
Wind -Y ecc.+	-21.0	-3.2	-20.9					-2.4	-31.4	-0.3	-19.9	4.5	71.5	-3.7	-20.2	-0.6				
Wind -Y ecc.-	-10.0	-0.6	-9.5					-0.4	-12.5	0.1	-9.6	0.8	27.2	-0.7	-8.0	0.2				
Earthquake X Mode 1	59.8	21.8	102.6					16.5	107.3	2.2	56.2	-31.1	-211.9	24.9	70.8	5.3				
Earthquake X Mode 2	142.6	-22.7	84.0					-17.4	84.7	0.3	140.4	32.6	-164.1	-25.4	55.9	-3.5				
Earthquake X Mode 3	9.1	1.6	13.2					1.2	12.9	-0.1	8.7	-2.2	-24.6	1.8	8.6	-0.0				
Earthquake X Mode 4	-18.2	-0.7	-34.8					-0.5	-2.1	-0.1	-18.5	0.9	-29.9	-0.8	-2.3	-0.2				
Earthquake X Mode 5	-29.3	1.0	-31.1					0.5	-0.6	0.0	-29.8	-0.5	-30.5	0.7	-1.3	0.3				
Earthquake X Mode 6	-3.4	-0.0	-5.6					-0.0	-0.3	0.0	-3.4	0.1	-4.9	-0.1	-0.3	-0.0				
Earthquake X Mode 7	0.0	-0.5	-11.3					-0.4	-8.2	-0.1	0.3	0.7	12.7	-0.5	-6.5	-0.1				
Earthquake X Mode 8	0.1	-0.3	-9.1					-0.2	-6.6	-0.0	0.3	0.4	10.2	-0.3	-5.2	-0.0				
Earthquake X Mode 9	-1.5	-0.9	16.7					-0.6	11.8	0.0	-1.9	1.1	-18.0	-0.9	9.4	-0.1				
Earthquake Y Mode 1	27.1	9.9	46.5					7.5	48.7	1.0	25.5	-14.1	-96.2	11.3	32.1	2.4				
Earthquake Y Mode 2	44.0	-7.0	25.9					-5.4	26.2	0.1	43.4	10.1	-50.7	-7.8	17.3	-1.1				
Earthquake Y Mode 3	55.8	9.7	81.4					7.2	79.5	-0.7	53.4	-13.6	-151.5	10.8	52.7	-0.1				
Earthquake Y Mode 4	-3.5	-0.1	-6.7					-0.1	-0.4	-0.0	-3.6	0.2	-5.8	-0.2	-0.4	-0.0				
Earthquake Y Mode 5	-5.3	0.2	-5.7					0.1	-0.1	0.0	-5.4	-0.1	-5.6	0.1	-0.2	0.0				
Earthquake Y Mode 6	-27.6	-0.2	-45.8					-0.2	-2.4	0.0	-28.0	0.6	-40.4	-0.4	-2.8	-0.0				
Earthquake Y Mode 7	0.0	-0.1	-3.4					-0.1	-2.5	-0.0	0.1	0.2	3.8	-0.2	-2.0	-0.0				
Earthquake Y Mode 8	0.3	-0.7	-22.6					-0.5	-16.4	-0.0	0.8	1.0	25.6	-0.8	-13.0	-0.1				
Earthquake Y Mode 9	-0.6	-0.3	6.1					-0.2	4.3	0.0	-0.7	0.4	-6.6	-0.3	3.4	-0.0				
	Floor 2	30.0	3.00/6.00					Self weight	530.3	4.7	-13.0	3.7	-3.6	-0.6	503.0	-6.7	-4.6	4.5	-0.6	0.6
								Dead load	127.2	-0.5	2.5	-0.3	0.2	0.0	128.3	0.7	2.3	-0.5	0.4	0.2
								Live load	184.0	2.7	-8.1	2.1	-2.4	-0.5	185.0	-3.8	-2.4	2.4	-0.7	0.1
								Wind +X ecc.+	-7.8	3.0	0.5	2.3	0.5	0.1	-7.8	-4.2	-1.1	3.4	0.3	0.6
				Wind +X ecc.-	-0.9	3.7	11.1	2.7	7.3	0.2	-1.1	-5.1	-10.3	4.1	5.2	0.8				
				Wind -X ecc.+	7.8	-3.0	-0.5	-2.3	-0.5	-0.1	7.8	4.2	1.1	-3.4	-0.3	-0.6				
				Wind -X ecc.-	0.9	-3.7	-11.1	-2.7	-7.3	-0.2	1.1	5.1	10.3	-4.1	-5.2	-0.8				
				Wind +Y ecc.+	56.0	3.3	81.2	2.5	51.0	0.3	54.8	-4.8	-67.4	3.9	36.9	0.6				
				Wind +Y ecc.-	24.2	0.4	32.5	0.3	19.7	-0.2	23.8	-0.6	-24.8	0.5	14.2	-0.3				
				Wind -Y ecc.+	-56.0	-3.3	-81.2	-2.5	-51.0	-0.3	-54.8	4.8	67.4	-3.9	-36.9	-0.6				
				Wind -Y ecc.-	-24.2	-0.4	-32.5	-0.3	-19.7	0.2	-23.8	0.6	24.8	-0.5	-14.2	0.3				
				Earthquake X Mode 1	152.4	21.8	262.1	16.4	147.8	2.3	149.2	-31.0	-167.5	25.0	107.0	5.6				
				Earthquake X Mode 2	260.6	-24.0	227.1	-17.6	121.2	0.3	259.2	31.7	-124.7	-25.4	88.6	-3.7				
				Earthquake X Mode 3	20.8	1.4	31.6	1.1	17.2	-0.1	20.5	-2.0	-18.4	1.6	12.5	-0.0				
				Earthquake X Mode 4	-9.5	1.2	5.4	0.9	18.5	0.1	-10.3	-1.7	-49.6	1.4	13.7	0.3				
				Earthquake X Mode 5	-20.0	-1.6	5.5	-1.4	17.3	0.1	-21.0	2.8	-46.0	-2.0	12.8	-0.1				
				Earthquake X Mode 6	-1.9	0.1	1.0	0.1	3.0	0.0	-2.1	-0.1	-8.0	0.1	2.2	0.0				
				Earthquake X Mode 7	-1.9	-0.1	-8.1	-0.0	-0.3	-0.0	-1.9	0.1	-7.5	-0.1	-0.3	-0.0				
				Earthquake X Mode 8	-1.4	-0.0	-6.3	-0.0	-0.2	-0.0	-1.4	0.0	-6.0	-0.0	-0.2	-0.0				
				Earthquake X Mode 9	1.7	-0.2	11.5	-0.1	0.1	-0.0	1.7	-0.0	11.6	-0.1	0.3	-0.1				
				Earthquake Y Mode 1	69.2	9.9	118.9	7.5	67.1	1.0	67.7	-14.1	-76.0	11.3	48.6	2.5				
				Earthquake Y Mode 2	80.5	-7.4	70.2	-5.4	37.5	0.1	80.1	9.8	-38.5	-7.8	27.4	-1.2				
				Earthquake Y Mode 3	128.2	8.7	194.5	6.6	106.0	-0.8	126.3	-12.5	-113.3	10.0	76.8	-0.2				
				Earthquake Y Mode 4	-1.8	0.2	1.0	0.2	3.6	0.0	-2.0	-0.3	-9.6	0.3	2.6	0.1				
				Earthquake Y Mode 5	-3.6	-0.3	1.0	-0.3	3.2	0.0	-3.8	0.5	-8.4	-0.4	2.3	-0.0				
				Earthquake Y Mode 6	-15.8	0.8	8.1	0.6	24.8	0.0	-17.0	-1.0	-65.8	0.8	18.4	0.0				
				Earthquake Y Mode 7	-0.6	-0.0	-2.4	-0.0	-0.1	-0.0	-0.6	0.0	-2.3	-0.0	-0.1	-0.0				
				Earthquake Y Mode 8	-3.6	-0.0	-15.8	-0.0	-0.4	-0.0	-3.6	0.1	-15.0	-0.1	-0.6	-0.0				
				Earthquake Y Mode 9	0.6	-0.1	4.2	-0.0	0.0	-0.0	0.6	-0.0	4.2	-0.0	0.1	-0.0				



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Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 1	30.0	0.00/3.00	Self weight	639.1	1.7	-2.3	1.7	-4.6	-0.6	614.2	-3.4	9.3	1.6	-0.2	0.4
				Dead load	147.6	-0.2	4.0	-0.2	-0.0	-0.0	149.1	0.5	4.3	-0.4	0.4	0.1
				Live load	221.7	0.9	-1.7	1.0	-3.0	-0.4	223.6	-1.9	5.9	0.8	-0.4	0.0
				Wind +X ecc.+	-9.9	2.3	-0.7	1.6	0.1	0.1	-10.0	-2.7	-0.9	2.3	-0.1	0.4
				Wind +X ecc.-	2.3	2.7	27.2	1.9	10.0	0.1	2.1	-3.3	-1.6	2.8	8.1	0.6
				Wind -X ecc.+	9.9	-2.3	0.7	-1.6	-0.1	-0.1	10.0	2.7	0.9	-2.3	0.1	-0.4
				Wind -X ecc.-	-2.3	-2.7	-27.2	-1.9	-10.0	-0.1	-2.1	3.3	1.6	-2.8	-8.1	-0.6
				Wind +Y ecc.+	96.3	1.4	208.1	1.3	73.3	0.2	95.8	-3.0	-2.7	2.3	60.7	0.5
				Wind +Y ecc.-	40.0	-0.2	78.8	-0.0	27.2	-0.1	40.0	-0.2	0.6	0.1	22.5	-0.3
				Wind -Y ecc.+	-96.3	-1.4	-208.1	-1.3	-73.3	-0.2	-95.8	3.0	2.7	-2.3	-60.7	-0.5
				Wind -Y ecc.-	-40.0	0.2	-78.8	0.0	-27.2	0.1	-40.0	0.2	-0.6	-0.1	-22.5	0.3
				Earthquake X Mode 1	252.1	12.8	557.2	9.7	184.5	1.5	251.3	-18.5	27.8	15.2	152.6	4.0
				Earthquake X Mode 2	375.9	-19.0	494.5	-11.8	157.9	0.3	377.1	18.1	42.2	-16.5	132.2	-2.9
				Earthquake X Mode 3	32.9	0.6	63.1	0.5	20.3	-0.1	32.9	-1.0	4.9	0.8	16.8	-0.1
				Earthquake X Mode 4	4.9	1.4	65.4	1.1	29.9	0.2	4.2	-2.0	-21.7	1.7	24.5	0.4
				Earthquake X Mode 5	-4.0	-2.6	61.2	-1.7	27.5	0.1	-4.9	2.8	-18.8	-2.4	22.6	-0.3
				Earthquake X Mode 6	0.5	0.1	10.4	0.1	4.7	-0.0	0.4	-0.1	-3.3	0.1	3.9	0.0
				Earthquake X Mode 7	0.2	0.3	15.2	0.3	9.2	0.0	0.0	-0.5	-11.8	0.4	7.6	0.1
				Earthquake X Mode 8	0.2	0.2	11.8	0.1	7.2	0.0	0.1	-0.3	-9.2	0.2	5.9	0.0
				Earthquake X Mode 9	-1.6	0.7	-22.0	0.5	-13.2	-0.0	-1.3	-0.9	16.6	0.7	-10.9	0.0
				Earthquake Y Mode 1	114.4	5.8	252.9	4.4	83.7	0.7	114.0	-8.4	12.6	6.9	69.3	1.8
				Earthquake Y Mode 2	116.1	-5.9	152.8	-3.6	48.8	0.1	116.5	5.6	13.0	-5.1	40.8	-0.9
				Earthquake Y Mode 3	202.4	3.6	388.2	3.1	125.0	-0.6	202.3	-6.4	30.0	4.9	103.4	-0.3
				Earthquake Y Mode 4	0.9	0.3	12.6	0.2	5.8	0.0	0.8	-0.4	-4.2	0.3	4.7	0.1
				Earthquake Y Mode 5	-0.7	-0.5	11.1	-0.3	5.0	0.0	-0.9	0.5	-3.4	-0.4	4.1	-0.0
				Earthquake Y Mode 6	4.0	0.6	85.4	0.5	38.8	-0.0	3.0	-1.1	-27.5	0.8	31.8	0.0
				Earthquake Y Mode 7	0.1	0.1	4.6	0.1	2.8	0.0	0.0	-0.1	-3.5	0.1	2.3	0.0
				Earthquake Y Mode 8	0.6	0.5	29.6	0.3	17.9	0.0	0.2	-0.7	-22.9	0.5	14.8	0.1
				Earthquake Y Mode 9	-0.6	0.3	-8.0	0.2	-4.8	-0.0	-0.5	-0.3	6.1	0.3	-4.0	0.0
				W20	techo	30.0	12.00/15.00	Self weight	147.2	-2.2	82.9	-1.4	78.1	-0.5	116.7	2.3
Dead load	-2.7	-1.1	12.8					-0.9	9.2	-0.1	-3.0	1.8	-14.6	-1.3	8.3	0.1
Live load	19.3	-1.5	38.6					-0.7	30.1	-0.2	17.1	0.7	-52.6	-0.8	29.2	-0.2
Wind +X ecc.+	-0.5	0.6	0.3					0.5	0.3	-0.0	-0.5	-1.0	-0.5	0.7	0.2	-0.1
Wind +X ecc.-	-0.8	0.7	-0.0					0.6	0.5	0.0	-0.8	-1.1	-1.5	0.8	0.4	-0.1
Wind -X ecc.+	0.5	-0.6	-0.3					-0.5	-0.3	0.0	0.5	1.0	0.5	-0.7	-0.2	0.1
Wind -X ecc.-	0.8	-0.7	0.0					-0.6	-0.5	-0.0	0.8	1.1	1.5	-0.8	-0.4	0.1
Wind +Y ecc.+	-2.9	0.6	-1.7					0.5	2.4	0.1	-3.3	-0.9	-8.9	0.6	1.9	-0.0
Wind +Y ecc.-	-1.6	0.1	-0.2					0.1	1.3	-0.0	-1.8	-0.1	-4.1	0.1	1.0	-0.0
Wind -Y ecc.+	2.9	-0.6	1.7					-0.5	-2.4	-0.1	3.3	0.9	8.9	-0.6	-1.9	0.0
Wind -Y ecc.-	1.6	-0.1	0.2					-0.1	-1.3	0.0	1.8	0.1	4.1	-0.1	-1.0	0.0
Earthquake X Mode 1	-18.2	5.0	0.8					4.2	13.3	0.5	-19.6	-8.1	-38.4	5.5	9.8	-0.4
Earthquake X Mode 2	-11.9	-5.5	-1.2					-4.8	9.8	0.4	-13.1	9.7	-30.2	-6.7	7.6	1.5
Earthquake X Mode 3	-2.0	0.3	-0.1					0.2	1.5	-0.0	-2.1	-0.4	-4.4	0.3	1.1	-0.1
Earthquake X Mode 4	13.2	-1.1	-10.3					-0.9	-8.9	-0.1	13.2	1.7	15.5	-1.2	-6.4	0.1
Earthquake X Mode 5	11.6	1.5	-9.7					1.2	-8.2	-0.1	11.6	-2.2	13.9	1.6	-5.9	-0.3
Earthquake X Mode 6	2.0	-0.1	-1.6					-0.0	-1.4	0.0	2.0	0.1	2.4	-0.1	-1.0	0.0
Earthquake X Mode 7	-4.0	0.3	5.0					0.2	3.2	0.0	-4.0	-0.4	-4.3	0.3	2.4	-0.0
Earthquake X Mode 8	-3.2	0.1	4.0					0.1	2.6	-0.0	-3.2	-0.2	-3.4	0.1	1.9	-0.0
Earthquake X Mode 9	5.7	0.5	-7.4					0.3	-4.7	-0.0	5.6	-0.5	6.2	0.4	-3.5	-0.1
Earthquake Y Mode 1	-8.3	2.3	0.4					1.9	6.0	0.2	-8.9	-3.7	-17.4	2.5	4.5	-0.2
Earthquake Y Mode 2	-3.7	-1.7	-0.4					-1.5	3.0	0.1	-4.1	3.0	-9.3	-2.1	2.3	0.5
Earthquake Y Mode 3	-12.1	1.6	-0.8					1.3	9.0	-0.3	-13.2	-2.6	-27.3	1.9	6.6	-0.6
Earthquake Y Mode 4	2.5	-0.2	-2.0					-0.2	-1.7	-0.0	2.5	0.3	3.0	-0.2	-1.2	0.0
Earthquake Y Mode 5	2.1	0.3	-1.8					0.2	-1.5	-0.0	2.1	-0.4	2.5	0.3	-1.1	-0.1
Earthquake Y Mode 6	16.7	-0.5	-13.0					-0.4	-11.4	0.0	16.7	0.7	19.9	-0.5	-8.1	0.1
Earthquake Y Mode 7	-1.2	0.1	1.5					0.1	1.0	0.0	-1.2	-0.1	-1.3	0.1	0.7	-0.0
Earthquake Y Mode 8	-8.0	0.4	10.0					0.3	6.4	-0.0	-7.9	-0.5	-8.6	0.4	4.8	-0.1
Earthquake Y Mode 9	2.1	0.2	-2.7					0.1	-1.7	-0.0	2.1	-0.2	2.3	0.2	-1.3	-0.0
Floor 4	30.0	9.00/12.00	Self weight					267.6	-2.6	59.9	-1.9	43.3	-0.5	244.9	3.4	-75.6
			Dead load		23.5	-1.1	9.7	-0.8	6.1	-0.1	22.2	1.4	-10.3	-1.0	8.4	-0.0
			Live load		89.9	-2.5	41.0	-1.9	32.3	-0.3	86.5	3.4	-59.8	-2.4	37.5	-0.0
			Wind +X ecc.+		-0.8	0.7	0.1	0.6	0.1	-0.0	-0.8	-1.1	-0.1	0.8	0.0	-0.1
			Wind +X ecc.-		-3.1	0.9	1.0	0.7	1.5	0.0	-3.2	-1.3	-3.3	0.9	1.0	-0.1
			Wind -X ecc.+		0.8	-0.7	-0.1	-0.6	-0.1	0.0	0.8	1.1	0.1	-0.8	-0.0	0.1
			Wind -X ecc.-		3.1	-0.9	-1.0	-0.7	-1.5	-0.0	3.2	1.3	3.3	-0.9	-1.0	0.1
			Wind +Y ecc.+		-18.4	0.7	7.0	0.5	10.7	0.1	-19.5	-0.9	-24.3	0.6	7.5	0.0
			Wind +Y ecc.-		-8.2	-0.0	3.2	-0.0	4.4	-0.1	-8.6	0.1	-9.7	-0.0	3.1	-0.0
			Wind -Y ecc.+		18.4	-0.7	-7.0	-0.5	-10.7	-0.1	19.5	0.9	24.3	-0.6	-7.5	-0.0
			Wind -Y ecc.-		8.2	0.0	-3.2	0.0	-4.4	0.1	8.6	-0.1	9.7	0.0	-3.1	0.0
			Earthquake X Mode 1		-78.5	6.2	32.0	4.9	39.5	0.6	-81.7	-8.8	-83.3	6.0	27.3	-0.2
			Earthquake X Mode 2		-62.3	-7.2	28.8	-5.7	34.6	0.5	-65.1	10.9	-72.5	-7.6	24.6	1.6
			Earthquake X Mode 3		-9.3	0.3	4.1	0.2	4.9	-0.1	-9.7	-0.4	-10.3	0.3	3.4	-0.1
			Earthquake X Mode 4		28.8	-1.0	-14.6	-0.7	-7.9	-0.1	28.5	1.1	7.9	-0.8	-5.1	0.0
			Earthquake X Mode 5		25.3	1.4	-13.3	0.9	-6.9	-0.1	25.0	-1.4	6.3	1.1	-4.4	-0.2
			Earthquake X Mode 6		4.5	-0.0	-2.4	-0.0	-1.3	0.0	4.5	0.0	1.3	-0.0	-0.8	0.0
			Earthquake X Mode 7		-5.2	0.0	1.3	-0.0	-0.7	-0.0	-4.9	0.1	3.7	-0.1	-0.8	0.0
			Earthquake X Mode 8		-4.2	-0.0	1.1	-0.0	-0.6	-0.0	-3.9	0.1	2.9	-0.0	-0.6	0.0
			Earthquake X Mode 9		7.2	0.0	-1.6	-0.1	1.3	0.0	6.7	0.2	-5.8	-0.1	1.3	0.0
Earthquake Y Mode 1	-35.6	2.8	14.5		2.2	17.9	0.3	-37.1	-4.0	-37.8	2.7	12.4	-0.1			
Earthquake Y Mode 2	-19.2	-2.2	8.9	-1.8	10.7	0.2	-20.1	3.4	-22.4	-2.4	7.6	0.5				
Earthquake Y Mode 3	-57.0	1.7	25.2	1.2	30.3	-0.4	-59.4	-2.2	-63.3	1.7	21.2	-0.6				
Earthquake Y Mode 4	5.5	-0.2	-2.8	-0.1	-1.5	-0.0	5.5	0.2	1.5	-0.2	-1.0	0.0				
Earthquake Y Mode 5	4.6	0.2	-2.4	0.2	-1.3	-0.0	4.5	-0.2	1.1	0.2	-0.8	-0.0				
Earthquake Y Mode 6	37.0	-0.3	-19.5	-0.2	-10.7	0.0	36.7	0.4	10.8	-0.3	-6.9	0.1				
Earthquake Y Mode 7	-1.6	0.0	0.4	-0.0	-0.2	-0.0	-1.5	0.0	1.1	-0.0	-0.2	0.0				
Earthquake Y Mode 8	-10.4	-0.0	2.6	-0.0	-1.4	-0.0	-9.8	0.1	7.3	-0.1	-1.6	0.0				
Earthquake Y Mode 9	2.6	0.0	-0.6	-0.0	0.5	0.0	2.4	0.1	-2.1	-0.0	0.5	0.0				



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Support	Floor	Dimension (cm)	Span (m)	Loadcase	Base						Head					
					N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)	N (kN)	Mx (kN-m)	My (kN-m)	Qx (kN)	Qy (kN)	T (kN-m)
	Floor 3	30.0	6.00/9.00	Self weight	397.8	-2.9	59.8	-2.1	47.5	-0.5	376.2	3.6	-89.2	-2.6	61.8	-0.2
				Dead load	48.9	-1.2	9.3	-0.9	6.4	-0.1	47.9	1.6	-11.6	-1.2	9.2	0.0
				Live load	161.3	-2.5	38.1	-1.8	29.8	-0.3	159.1	3.2	-55.5	-2.3	37.2	-0.1
				Wind +X ecc.+	-1.1	1.0	0.1	0.8	0.1	-0.0	-1.1	-1.5	-0.1	1.0	-0.0	-0.1
				Wind +X ecc.-	-7.7	1.2	2.5	0.9	2.5	0.0	-7.9	-1.7	-4.7	1.2	1.6	-0.1
				Wind -X ecc.+	1.1	-1.0	-0.1	-0.8	-0.1	0.0	1.1	1.5	0.1	-1.0	0.0	0.1
				Wind -X ecc.-	7.7	-1.2	-2.5	-0.9	-2.5	-0.0	7.9	1.7	4.7	-1.2	-1.6	0.1
				Wind +Y ecc.+	-52.1	0.8	19.1	0.6	18.6	0.1	-53.1	-1.1	-34.5	0.8	12.0	-0.0
				Wind +Y ecc.-	-21.7	-0.1	7.8	-0.1	7.3	-0.1	-22.0	0.2	-13.3	-0.1	4.7	-0.1
				Wind -Y ecc.+	52.1	-0.8	-19.1	-0.6	-18.6	-0.1	53.1	1.1	34.5	-0.8	-12.0	0.0
				Wind -Y ecc.-	21.7	0.1	-7.8	0.1	-7.3	0.1	22.0	-0.2	13.3	0.1	-4.7	0.1
				Earthquake X Mode 1	-190.9	7.8	69.2	6.0	60.8	0.8	-193.5	-10.7	-105.8	7.4	38.8	-0.2
				Earthquake X Mode 2	-159.4	-9.3	61.6	-7.2	52.8	0.6	-161.4	13.2	-90.4	-9.4	34.3	1.9
				Earthquake X Mode 3	-22.7	0.3	8.5	0.2	7.3	-0.1	-23.0	-0.4	-12.4	0.3	4.6	-0.1
				Earthquake X Mode 4	34.9	-0.4	-8.5	-0.2	-0.7	-0.0	34.3	0.2	-7.1	-0.2	0.5	-0.0
				Earthquake X Mode 5	29.9	0.5	-7.3	0.2	-0.1	-0.0	29.2	0.0	-7.6	0.1	0.7	0.0
				Earthquake X Mode 6	5.5	-0.0	-1.4	-0.0	-0.1	0.0	5.4	0.0	-1.2	-0.0	0.1	0.0
				Earthquake X Mode 7	-1.3	-0.3	-4.5	-0.2	-3.4	-0.0	-1.2	0.3	5.4	-0.2	-2.6	0.0
				Earthquake X Mode 8	-1.1	-0.1	-3.6	-0.1	-2.7	0.0	-1.0	0.1	4.3	-0.1	-2.1	0.0
				Earthquake X Mode 9	1.3	-0.4	6.6	-0.3	4.9	0.0	1.2	0.5	-7.8	-0.4	3.8	0.1
				Earthquake Y Mode 1	-86.6	3.5	31.4	2.7	27.6	0.3	-87.8	-4.9	-48.0	3.4	17.6	-0.1
				Earthquake Y Mode 2	-49.2	-2.9	19.0	-2.2	16.3	0.2	-49.9	4.1	-27.9	-2.9	10.6	0.6
				Earthquake Y Mode 3	-139.9	1.8	52.1	1.3	44.7	-0.5	-141.7	-2.4	-76.4	1.8	28.6	-0.8
				Earthquake Y Mode 4	6.7	-0.1	-1.6	-0.0	-0.1	-0.0	6.6	0.0	-1.4	-0.0	0.1	-0.0
				Earthquake Y Mode 5	5.4	0.1	-1.3	0.0	-0.0	-0.0	5.3	0.0	-1.4	0.0	0.1	0.0
				Earthquake Y Mode 6	45.0	-0.1	-11.2	-0.0	-0.8	0.0	44.1	0.0	-9.8	-0.0	0.7	0.0
				Earthquake Y Mode 7	-0.4	-0.1	-1.3	-0.1	-1.0	-0.0	-0.4	0.1	1.6	-0.1	-0.8	0.0
				Earthquake Y Mode 8	-2.7	-0.3	-8.9	-0.2	-6.7	0.0	-2.6	0.4	10.7	-0.3	-5.2	0.0
				Earthquake Y Mode 9	0.5	-0.2	2.4	-0.1	1.8	0.0	0.4	0.2	-2.8	-0.1	1.4	0.0
	Floor 2	30.0	3.00/6.00	Self weight	533.7	-3.7	61.1	-2.6	45.4	-0.4	514.3	4.5	-82.2	-3.3	63.9	-0.1
				Dead load	74.4	-1.4	9.9	-1.0	6.6	-0.1	73.8	1.7	-11.6	-1.3	10.0	0.0
				Live load	236.5	-3.0	39.8	-2.1	29.9	-0.3	235.4	3.7	-54.4	-2.7	39.6	-0.0
				Wind +X ecc.+	-1.1	1.2	-0.1	0.9	-0.0	-0.0	-1.1	-1.6	-0.0	1.1	-0.1	-0.2
				Wind +X ecc.-	-14.5	1.5	4.6	1.1	3.4	0.0	-14.6	-1.9	-5.2	1.4	2.1	-0.1
				Wind -X ecc.+	1.1	-1.2	0.1	-0.9	0.0	0.0	1.1	1.6	0.0	-1.1	0.1	0.2
				Wind -X ecc.-	14.5	-1.5	-4.6	-1.1	-3.4	-0.0	14.6	1.9	5.2	-1.4	-2.1	0.1
				Wind +Y ecc.+	-102.5	0.9	35.8	0.7	26.1	0.1	-103.1	-1.2	-38.7	0.8	16.1	-0.0
				Wind +Y ecc.-	-41.2	-0.2	14.1	-0.1	10.1	-0.1	-41.4	0.3	-14.6	-0.2	6.2	-0.1
				Wind -Y ecc.+	102.5	-0.9	-35.8	-0.7	-26.1	-0.1	103.1	1.2	38.7	-0.8	-16.1	0.0
				Wind -Y ecc.-	41.2	0.2	-14.1	0.1	-10.1	0.1	41.4	-0.3	14.6	0.2	-6.2	0.1
				Earthquake X Mode 1	-341.3	8.5	110.0	6.2	75.2	0.8	-342.6	-10.6	-104.2	7.6	45.1	-0.2
				Earthquake X Mode 2	-290.2	-10.3	98.2	-7.4	65.8	0.6	-291.0	12.6	-89.4	-9.5	40.1	1.8
				Earthquake X Mode 3	-40.3	0.3	13.1	0.2	8.8	-0.1	-40.4	-0.3	-11.8	0.2	5.2	-0.1
				Earthquake X Mode 4	25.1	0.5	5.7	0.4	8.2	0.1	24.7	-0.8	-18.5	0.6	6.8	-0.0
				Earthquake X Mode 5	19.8	-0.7	5.9	-0.6	8.0	0.0	19.4	1.3	-17.7	-0.9	6.4	0.2
				Earthquake X Mode 6	3.9	0.0	1.0	0.0	1.3	-0.0	3.8	-0.0	-3.0	0.0	1.1	-0.0
				Earthquake X Mode 7	1.2	-0.1	-2.3	-0.0	-0.2	-0.0	0.9	-0.0	-1.8	-0.0	-0.0	-0.0
				Earthquake X Mode 8	0.9	-0.0	-1.8	-0.0	-0.2	0.0	0.7	-0.0	-1.5	0.0	-0.0	-0.0
				Earthquake X Mode 9	-2.3	-0.1	3.2	-0.0	0.3	0.0	-1.8	-0.1	2.8	-0.0	-0.0	-0.0
				Earthquake Y Mode 1	-154.9	3.9	49.9	2.8	34.1	0.3	-155.5	-4.8	-47.3	3.4	20.4	-0.1
				Earthquake Y Mode 2	-89.6	-3.2	30.3	-2.3	20.3	0.2	-89.9	3.9	-27.6	-2.9	12.4	0.6
				Earthquake Y Mode 3	-248.1	1.6	80.5	1.1	53.9	-0.6	-248.8	-1.9	-72.9	1.5	32.3	-0.8
				Earthquake Y Mode 4	4.8	0.1	1.1	0.1	1.6	0.0	4.8	-0.2	-3.6	0.1	1.3	-0.0
				Earthquake Y Mode 5	3.6	-0.1	1.1	-0.1	1.5	0.0	3.5	0.2	-3.2	-0.2	1.2	0.0
				Earthquake Y Mode 6	31.8	0.2	7.9	0.1	11.0	-0.0	31.2	-0.3	-24.7	0.2	9.1	-0.0
				Earthquake Y Mode 7	0.4	-0.0	-0.7	-0.0	-0.1	-0.0	0.3	-0.0	-0.5	-0.0	-0.0	-0.0
				Earthquake Y Mode 8	2.3	-0.0	-4.5	-0.0	-0.4	0.0	1.6	-0.0	-3.7	0.0	-0.0	-0.0
				Earthquake Y Mode 9	-0.8	-0.1	1.2	-0.0	0.1	0.0	-0.7	-0.0	1.0	-0.0	-0.0	-0.0
	Floor 1	30.0	0.00/3.00	Self weight	686.1	-1.6	29.3	-1.7	28.9	-0.3	668.6	3.8	-66.4	-2.3	54.8	-0.0
				Dead load	101.4	-0.6	5.3	-0.6	4.2	-0.1	101.2	1.4	-9.2	-0.8	8.7	0.0
				Live load	321.9	-1.3	19.3	-1.4	19.2	-0.2	321.8	3.0	-44.1	-1.8	33.3	0.0
				Wind +X ecc.+	-1.0	1.3	-0.3	0.7	-0.1	-0.0	-1.1	-1.0	0.0	0.9	-0.1	-0.1
				Wind +X ecc.-	-21.6	1.5	9.0	0.9	4.3	0.0	-21.5	-1.3	-3.1	1.1	2.7	-0.1
				Wind -X ecc.+	1.0	-1.3	0.3	-0.7	0.1	0.0	1.1	1.0	-0.0	-0.9	0.1	0.1
				Wind -X ecc.-	21.6	-1.5	-9.0	-0.9	-4.3	-0.0	21.5	1.3	3.1	-1.1	-2.7	0.1
				Wind +Y ecc.+	-156.2	0.6	69.8	0.4	32.6	0.0	-155.1	-0.7	-22.7	0.5	20.8	-0.0
				Wind +Y ecc.-	-61.4	-0.4	26.3	-0.2	12.1	-0.1	-61.0	0.3	-8.1	-0.3	7.7	-0.1
				Wind -Y ecc.+	156.2	-0.6	-69.8	-0.4	-32.6	-0.0	155.1	0.7	22.7	-0.5	-20.8	0.0
				Wind -Y ecc.-	61.4	0.4	-26.3	0.2	-12.1	0.1	61.0	-0.3	8.1	0.3	-7.7	0.1
				Earthquake X Mode 1	-487.0	7.2	184.9	4.5	83.0	0.5	-484.1	-6.6	-49.6	5.2	50.3	-0.0
				Earthquake X Mode 2	-417.8	-10.0	164.8	-5.6	73.1	0.4	-414.9	7.4	-41.8	-6.7	45.0	1.0
				Earthquake X Mode 3	-56.8	0.1	20.8	0.0	9.2	-0.1	-56.4	-0.1	-5.1	0.1	5.5	-0.1
				Earthquake X Mode 4	6.8	0.9	22.9	0.6	12.5	0.1	7.6	-0.9	-13.2	0.7	9.7	-0.0
				Earthquake X Mode 5	2.4	-1.4	21.6	-0.9	11.8	0.1	3.1	1.3	-12.4	-1.1	9.0	0.2
				Earthquake X Mode 6	0.9	0.0	3.6	0.0	2.0	-0.0	1.1	-0.0	-2.1	0.0	1.5	-0.0
				Earthquake X Mode 7	-1.4	0.2	5.6	0.2	3.6	0.0	-1.6	-0.3	-5.1	0.2	2.9	-0.0
				Earthquake X Mode 8	-1.1	0.1	4.3	0.1	2.8	-0.0	-1.2	-0.1	-3.9	0.1	2.3	-0.0
				Earthquake X Mode 9	1.5	0.4	-8.0	0.3	-5.2	-0.0	1.7	-0.5	7.3	0.4	-4.2	-0.1
				Earthquake Y Mode 1	-221.0	3.3	83.9	2.1	37.7	0.2	-219.7	-3.0	-22.5	2.4	22.8	-0.0



4.- STARTS OF COLUMNS, SHEAR WALLS AND WALLS BY LOADCASE

▪ Note:

The forces refer to the local axes of the column.

The forces of shear walls and walls are in given in terms of the general axes and in reference to the centre of gravity of the wall on the floor.



Column, shear wall and wall forces and reinforcement

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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C1	Self weight	676.2	26.2	27.8	29.1	31.5	0.0
	Dead load	170.9	8.0	8.0	8.9	9.1	0.0
	Live load	251.0	14.4	14.3	16.0	16.2	0.0
	Wind +X ecc.+	-2.0	-2.3	-0.1	-1.1	-0.0	0.0
	Wind +X ecc.-	-1.5	-3.1	1.4	-1.6	0.8	-0.0
	Wind -X ecc.+	2.0	2.3	0.1	1.1	0.0	-0.0
	Wind -X ecc.-	1.5	3.1	-1.4	1.6	-0.8	0.0
	Wind +Y ecc.+	-3.0	-1.7	-2.6	-0.8	-1.5	-0.0
	Wind +Y ecc.-	-5.4	2.1	-9.3	1.2	-5.1	0.0
	Wind -Y ecc.+	3.0	1.7	2.6	0.8	1.5	0.0
	Wind -Y ecc.-	5.4	-2.1	9.3	-1.2	5.1	-0.0
	Earthquake X Mode 1	2.1	-19.7	21.6	-9.6	11.3	-0.1
	Earthquake X Mode 2	24.6	14.4	8.1	6.9	4.1	-0.1
	Earthquake X Mode 3	-6.0	0.9	-7.2	0.5	-3.9	0.0
	Earthquake X Mode 4	-0.2	-2.6	3.3	-1.5	1.9	-0.0
	Earthquake X Mode 5	-1.0	2.0	1.9	1.1	1.1	-0.0
	Earthquake X Mode 6	0.2	0.0	-0.6	0.0	-0.4	0.0
	Earthquake X Mode 7	-0.0	-0.8	1.2	-0.5	0.8	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0
	Earthquake X Mode 9	-0.0	-0.7	-0.3	-0.4	-0.2	0.0
	Earthquake Y Mode 1	1.0	-8.9	9.8	-4.4	5.1	-0.0
	Earthquake Y Mode 2	7.6	4.4	2.5	2.1	1.3	-0.0
	Earthquake Y Mode 3	-36.9	5.6	-44.6	3.3	-23.8	0.1
	Earthquake Y Mode 4	-0.0	-0.5	0.6	-0.3	0.4	-0.0
	Earthquake Y Mode 5	-0.2	0.4	0.3	0.2	0.2	-0.0
	Earthquake Y Mode 6	1.3	0.2	-5.3	0.2	-3.2	0.0
	Earthquake Y Mode 7	-0.0	-0.2	0.4	-0.2	0.2	-0.0
	Earthquake Y Mode 8	-0.1	-0.4	-1.3	-0.3	-0.9	0.0
	Earthquake Y Mode 9	-0.0	-0.2	-0.1	-0.2	-0.1	0.0
C2	Self weight	1241.1	-3.0	52.5	-3.4	58.8	0.0
	Dead load	242.0	-0.8	7.5	-0.9	8.5	0.0
	Live load	543.2	-1.9	32.0	-2.1	35.8	0.0
	Wind +X ecc.+	0.1	-2.7	-0.0	-1.6	-0.0	0.0
	Wind +X ecc.-	1.0	-3.7	0.9	-2.2	0.5	-0.0
	Wind -X ecc.+	-0.1	2.7	0.0	1.6	0.0	-0.0
	Wind -X ecc.-	-1.0	3.7	-0.9	2.2	-0.5	0.0
	Wind +Y ecc.+	-3.3	-2.0	-4.0	-1.1	-2.3	-0.0
	Wind +Y ecc.-	-7.6	2.5	-8.4	1.6	-4.8	0.0
	Wind -Y ecc.+	3.3	2.0	4.0	1.1	2.3	0.0
	Wind -Y ecc.-	7.6	-2.5	8.4	-1.6	4.8	-0.0
	Earthquake X Mode 1	16.4	-23.5	12.8	-13.9	7.2	-0.1
	Earthquake X Mode 2	3.0	17.3	2.4	10.1	1.4	-0.1
	Earthquake X Mode 3	-7.3	1.0	-6.5	0.7	-3.7	0.0
	Earthquake X Mode 4	-0.8	-3.1	2.1	-2.0	1.3	-0.0
	Earthquake X Mode 5	-0.3	2.4	1.0	1.5	0.6	-0.0
	Earthquake X Mode 6	0.2	0.0	-0.6	0.0	-0.4	0.0
	Earthquake X Mode 7	0.0	-0.9	0.8	-0.7	0.6	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0
	Earthquake X Mode 9	0.0	-0.8	-0.1	-0.5	-0.0	0.0
	Earthquake Y Mode 1	7.5	-10.7	5.8	-6.3	3.3	-0.0
	Earthquake Y Mode 2	0.9	5.3	0.7	3.1	0.4	-0.0
	Earthquake Y Mode 3	-45.2	6.5	-40.1	4.3	-22.7	0.1
	Earthquake Y Mode 4	-0.2	-0.6	0.4	-0.4	0.2	-0.0
	Earthquake Y Mode 5	-0.0	0.4	0.2	0.3	0.1	-0.0
	Earthquake Y Mode 6	1.6	0.2	-5.1	0.2	-3.2	0.0
	Earthquake Y Mode 7	0.0	-0.3	0.2	-0.2	0.2	-0.0
	Earthquake Y Mode 8	-0.0	-0.5	-1.4	-0.3	-1.0	0.0
	Earthquake Y Mode 9	0.0	-0.3	-0.0	-0.2	-0.0	0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C3	Self weight	1204.7	0.5	51.3	0.5	57.4	0.0
	Dead load	237.9	0.1	7.3	0.1	8.2	0.0
	Live load	524.4	0.3	31.2	0.3	34.9	0.0
	Wind +X ecc.+	0.1	-2.7	-0.0	-1.6	0.0	0.0
	Wind +X ecc.-	0.3	-3.7	0.3	-2.2	0.2	-0.0
	Wind -X ecc.+	-0.1	2.7	0.0	1.6	-0.0	-0.0
	Wind -X ecc.-	-0.3	3.7	-0.3	2.2	-0.2	0.0
	Wind +Y ecc.+	-5.0	-2.0	-5.1	-1.2	-2.9	-0.0
	Wind +Y ecc.-	-6.2	2.4	-6.7	1.5	-3.8	0.0
	Wind -Y ecc.+	5.0	2.0	5.1	1.2	2.9	0.0
	Wind -Y ecc.-	6.2	-2.4	6.7	-1.5	3.8	-0.0
	Earthquake X Mode 1	1.9	-23.2	2.6	-13.6	1.6	-0.1
	Earthquake X Mode 2	-6.5	17.2	-4.2	10.0	-2.3	-0.1
	Earthquake X Mode 3	-5.9	1.0	-5.2	0.6	-2.9	0.0
	Earthquake X Mode 4	-0.3	-3.1	0.7	-2.0	0.4	-0.0
	Earthquake X Mode 5	0.1	2.3	-0.1	1.5	-0.0	-0.0
	Earthquake X Mode 6	0.2	0.0	-0.5	0.0	-0.3	0.0
	Earthquake X Mode 7	0.0	-0.9	0.4	-0.6	0.3	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0
	Earthquake X Mode 9	0.0	-0.8	0.2	-0.5	0.2	0.0
	Earthquake Y Mode 1	0.9	-10.6	1.2	-6.2	0.7	-0.0
	Earthquake Y Mode 2	-2.0	5.3	-1.3	3.1	-0.7	-0.0
	Earthquake Y Mode 3	-36.4	6.1	-32.2	3.9	-17.7	0.1
	Earthquake Y Mode 4	-0.1	-0.6	0.1	-0.4	0.1	-0.0
	Earthquake Y Mode 5	0.0	0.4	-0.0	0.3	-0.0	-0.0
	Earthquake Y Mode 6	1.6	0.2	-4.5	0.1	-2.7	0.0
	Earthquake Y Mode 7	0.0	-0.3	0.1	-0.2	0.1	-0.0
	Earthquake Y Mode 8	-0.0	-0.5	-1.3	-0.4	-0.9	0.0
	Earthquake Y Mode 9	0.0	-0.3	0.1	-0.2	0.1	0.0
C4	Self weight	1212.7	0.2	52.1	0.2	58.1	0.0
	Dead load	237.7	-0.0	7.3	-0.0	8.3	0.0
	Live load	528.4	0.2	31.7	0.2	35.3	0.0
	Wind +X ecc.+	-0.1	-2.7	-0.0	-1.6	-0.0	0.0
	Wind +X ecc.-	-0.4	-3.7	-0.3	-2.2	-0.1	-0.0
	Wind -X ecc.+	0.1	2.7	0.0	1.6	0.0	-0.0
	Wind -X ecc.-	0.4	3.7	0.3	2.2	0.1	0.0
	Wind +Y ecc.+	-6.6	-2.0	-6.5	-1.1	-3.6	-0.0
	Wind +Y ecc.-	-5.0	2.4	-5.3	1.5	-3.0	0.0
	Wind -Y ecc.+	6.6	2.0	6.5	1.1	3.6	0.0
	Wind -Y ecc.-	5.0	-2.4	5.3	-1.5	3.0	-0.0
	Earthquake X Mode 1	-10.7	-23.2	-7.5	-13.5	-4.0	-0.1
	Earthquake X Mode 2	-12.8	17.2	-10.4	10.1	-5.5	-0.1
	Earthquake X Mode 3	-4.8	1.0	-4.2	0.7	-2.3	0.0
	Earthquake X Mode 4	0.2	-3.1	-0.7	-2.0	-0.4	-0.0
	Earthquake X Mode 5	0.3	2.3	-1.0	1.5	-0.6	-0.0
	Earthquake X Mode 6	0.1	0.0	-0.5	0.0	-0.3	0.0
	Earthquake X Mode 7	0.0	-0.9	-0.1	-0.6	-0.0	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0
	Earthquake X Mode 9	0.0	-0.8	0.5	-0.5	0.4	0.0
	Earthquake Y Mode 1	-4.9	-10.5	-3.4	-6.1	-1.8	-0.0
	Earthquake Y Mode 2	-4.0	5.3	-3.2	3.1	-1.7	-0.0
	Earthquake Y Mode 3	-29.5	6.2	-25.6	4.0	-14.2	0.1
	Earthquake Y Mode 4	0.0	-0.6	-0.1	-0.4	-0.1	-0.0
	Earthquake Y Mode 5	0.0	0.4	-0.2	0.3	-0.1	-0.0
	Earthquake Y Mode 6	1.2	0.2	-4.2	0.2	-2.6	0.0
	Earthquake Y Mode 7	0.0	-0.3	-0.0	-0.2	-0.0	-0.0
	Earthquake Y Mode 8	-0.0	-0.5	-1.3	-0.3	-0.9	0.0
	Earthquake Y Mode 9	0.0	-0.3	0.2	-0.2	0.1	0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C5	Self weight	1152.2	-0.2	44.6	-0.2	49.6	0.0
	Dead load	228.4	0.2	6.1	0.2	6.9	0.0
	Live load	493.6	-0.1	26.9	-0.2	29.9	0.0
	Wind +X ecc.+	-0.2	-2.7	0.0	-1.6	0.0	0.0
	Wind +X ecc.-	-1.6	-3.7	-0.9	-2.2	-0.5	-0.0
	Wind -X ecc.+	0.2	2.7	-0.0	1.6	-0.0	-0.0
	Wind -X ecc.-	1.6	3.7	0.9	2.2	0.5	0.0
	Wind +Y ecc.+	-11.9	-2.1	-8.0	-1.3	-4.6	-0.0
	Wind +Y ecc.-	-5.3	2.4	-3.9	1.5	-2.2	0.0
	Wind -Y ecc.+	11.9	2.1	8.0	1.3	4.6	0.0
	Wind -Y ecc.-	5.3	-2.4	3.9	-1.5	2.2	-0.0
	Earthquake X Mode 1	-35.5	-23.8	-18.3	-14.1	-10.3	-0.1
	Earthquake X Mode 2	-30.5	17.0	-17.5	9.8	-9.7	-0.1
	Earthquake X Mode 3	-5.0	1.0	-3.1	0.6	-1.7	0.0
	Earthquake X Mode 4	1.3	-3.1	-2.1	-2.0	-1.3	-0.0
	Earthquake X Mode 5	1.0	2.3	-2.1	1.5	-1.3	-0.0
	Earthquake X Mode 6	0.2	0.0	-0.5	0.0	-0.3	0.0
	Earthquake X Mode 7	-0.1	-0.9	-0.5	-0.7	-0.4	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0
	Earthquake X Mode 9	0.1	-0.7	0.9	-0.5	0.6	0.0
	Earthquake Y Mode 1	-16.1	-10.8	-8.3	-6.4	-4.7	-0.0
	Earthquake Y Mode 2	-9.4	5.3	-5.4	3.0	-3.0	-0.0
	Earthquake Y Mode 3	-31.1	6.0	-18.9	3.8	-10.5	0.1
	Earthquake Y Mode 4	0.3	-0.6	-0.4	-0.4	-0.3	-0.0
	Earthquake Y Mode 5	0.2	0.4	-0.4	0.3	-0.2	-0.0
	Earthquake Y Mode 6	1.8	0.2	-3.8	0.1	-2.3	0.0
	Earthquake Y Mode 7	-0.0	-0.3	-0.2	-0.2	-0.1	-0.0
	Earthquake Y Mode 8	-0.1	-0.5	-1.3	-0.4	-0.9	0.0
	Earthquake Y Mode 9	0.0	-0.3	0.3	-0.2	0.2	0.0
C6	Self weight	589.6	-22.2	21.0	-24.7	23.3	0.0
	Dead load	165.6	-7.2	7.2	-8.0	8.1	0.0
	Live load	224.7	-11.8	11.8	-13.1	13.1	0.0
	Wind +X ecc.+	2.0	-2.3	0.0	-1.1	-0.0	0.0
	Wind +X ecc.-	1.6	-3.1	-1.2	-1.5	-0.6	-0.0
	Wind -X ecc.+	-2.0	2.3	-0.0	1.1	0.0	-0.0
	Wind -X ecc.-	-1.6	3.1	1.2	1.5	0.6	0.0
	Wind +Y ecc.+	-4.6	-1.7	-7.7	-0.8	-3.5	-0.0
	Wind +Y ecc.-	-3.1	2.1	-1.9	1.1	-0.8	0.0
	Wind -Y ecc.+	4.6	1.7	7.7	0.8	3.5	0.0
	Wind -Y ecc.-	3.1	-2.1	1.9	-1.1	0.8	-0.0
	Earthquake X Mode 1	-3.4	-19.5	-23.6	-9.4	-10.5	-0.1
	Earthquake X Mode 2	-34.2	14.4	-19.5	6.9	-8.4	-0.1
	Earthquake X Mode 3	-2.2	0.9	-1.5	0.5	-0.6	0.0
	Earthquake X Mode 4	0.2	-2.6	-3.0	-1.5	-1.6	-0.0
	Earthquake X Mode 5	1.3	2.0	-2.6	1.1	-1.3	-0.0
	Earthquake X Mode 6	0.1	0.0	-0.3	0.0	-0.2	0.0
	Earthquake X Mode 7	-0.0	-0.8	-0.8	-0.5	-0.5	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.3	0.0
	Earthquake X Mode 9	0.1	-0.7	1.0	-0.4	0.6	0.0
	Earthquake Y Mode 1	-1.5	-8.9	-10.7	-4.3	-4.8	-0.0
	Earthquake Y Mode 2	-10.6	4.5	-6.0	2.1	-2.6	-0.0
	Earthquake Y Mode 3	-13.8	5.4	-9.4	3.1	-3.8	0.1
	Earthquake Y Mode 4	0.0	-0.5	-0.6	-0.3	-0.3	-0.0
	Earthquake Y Mode 5	0.2	0.4	-0.5	0.2	-0.2	-0.0
	Earthquake Y Mode 6	0.9	0.2	-2.7	0.1	-1.4	0.0
	Earthquake Y Mode 7	-0.0	-0.2	-0.2	-0.2	-0.2	-0.0
	Earthquake Y Mode 8	-0.1	-0.4	-1.2	-0.3	-0.8	0.0
	Earthquake Y Mode 9	0.0	-0.2	0.4	-0.2	0.2	0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C7	Self weight	722.0	13.3	-18.6	14.9	-20.1	0.0
	Dead load	177.2	2.1	-5.2	2.3	-5.6	0.0
	Live load	268.1	8.3	-9.9	9.2	-10.6	0.0
	Wind +X ecc.+	-4.1	-2.5	-0.1	-1.3	-0.0	0.0
	Wind +X ecc.-	-2.3	-2.8	1.9	-1.5	1.3	-0.0
	Wind -X ecc.+	4.1	2.5	0.1	1.3	0.0	-0.0
	Wind -X ecc.-	2.3	2.8	-1.9	1.5	-1.3	0.0
	Wind +Y ecc.+	-3.6	-0.6	-3.3	-0.3	-2.3	-0.0
	Wind +Y ecc.-	-11.9	0.7	-12.3	0.4	-8.4	0.0
	Wind -Y ecc.+	3.6	0.6	3.3	0.3	2.3	0.0
	Wind -Y ecc.-	11.9	-0.7	12.3	-0.4	8.4	-0.0
	Earthquake X Mode 1	19.6	-11.2	29.0	-5.8	19.5	-0.1
	Earthquake X Mode 2	60.1	21.6	11.0	11.2	7.2	-0.1
	Earthquake X Mode 3	-13.0	-0.2	-9.6	-0.1	-6.5	0.0
	Earthquake X Mode 4	-0.7	-1.4	4.3	-0.9	3.0	-0.0
	Earthquake X Mode 5	-1.9	3.1	2.4	1.8	1.7	-0.0
	Earthquake X Mode 6	0.2	-0.0	-0.8	-0.0	-0.6	0.0
	Earthquake X Mode 7	-0.1	-0.4	1.5	-0.3	1.1	-0.0
	Earthquake X Mode 8	0.0	-0.2	-0.6	-0.1	-0.5	0.0
	Earthquake X Mode 9	0.0	-1.0	-0.4	-0.7	-0.3	0.0
	Earthquake Y Mode 1	8.9	-5.1	13.1	-2.6	8.8	-0.0
	Earthquake Y Mode 2	18.6	6.7	3.4	3.5	2.2	-0.0
	Earthquake Y Mode 3	-79.9	-1.4	-59.3	-0.6	-40.2	0.1
	Earthquake Y Mode 4	-0.1	-0.3	0.8	-0.2	0.6	-0.0
	Earthquake Y Mode 5	-0.3	0.6	0.4	0.3	0.3	-0.0
	Earthquake Y Mode 6	2.0	-0.3	-6.9	-0.2	-4.9	0.0
	Earthquake Y Mode 7	-0.0	-0.1	0.4	-0.1	0.3	-0.0
	Earthquake Y Mode 8	0.1	-0.5	-1.6	-0.3	-1.2	0.0
	Earthquake Y Mode 9	0.0	-0.4	-0.2	-0.2	-0.1	0.0
C8	Self weight	863.2	-0.6	-5.3	-0.7	-5.6	0.0
	Dead load	171.1	-0.2	-1.0	-0.2	-1.1	0.0
	Live load	440.0	-0.4	-3.6	-0.5	-3.8	0.0
	Wind +X ecc.+	1.0	-1.3	-0.0	-1.0	0.0	0.0
	Wind +X ecc.-	1.2	-1.5	0.3	-1.1	0.2	-0.0
	Wind -X ecc.+	-1.0	1.3	0.0	1.0	-0.0	-0.0
	Wind -X ecc.-	-1.2	1.5	-0.3	1.1	-0.2	0.0
	Wind +Y ecc.+	-0.0	-0.3	-0.7	-0.2	-0.5	-0.0
	Wind +Y ecc.-	-1.3	0.4	-2.0	0.3	-1.4	0.0
	Wind -Y ecc.+	0.0	0.3	0.7	0.2	0.5	0.0
	Wind -Y ecc.-	1.3	-0.4	2.0	-0.3	1.4	-0.0
	Earthquake X Mode 1	8.2	-6.1	4.0	-4.6	2.7	-0.0
	Earthquake X Mode 2	-8.9	11.8	1.2	8.9	0.7	-0.0
	Earthquake X Mode 3	-0.9	-0.1	-1.6	-0.1	-1.1	0.0
	Earthquake X Mode 4	-0.3	-0.7	0.6	-0.6	0.4	-0.0
	Earthquake X Mode 5	0.2	1.6	0.3	1.2	0.2	-0.0
	Earthquake X Mode 6	0.0	-0.0	-0.1	-0.0	-0.1	0.0
	Earthquake X Mode 7	0.0	-0.2	0.2	-0.1	0.2	-0.0
	Earthquake X Mode 8	0.0	-0.1	-0.1	-0.1	-0.1	0.0
	Earthquake X Mode 9	0.1	-0.4	-0.0	-0.3	-0.0	0.0
	Earthquake Y Mode 1	3.7	-2.8	1.8	-2.1	1.2	-0.0
	Earthquake Y Mode 2	-2.7	3.6	0.4	2.8	0.2	-0.0
	Earthquake Y Mode 3	-5.4	-0.8	-9.8	-0.6	-6.5	0.0
	Earthquake Y Mode 4	-0.1	-0.1	0.1	-0.1	0.1	-0.0
	Earthquake Y Mode 5	0.0	0.3	0.1	0.2	0.0	-0.0
	Earthquake Y Mode 6	0.1	-0.2	-1.2	-0.1	-0.8	0.0
	Earthquake Y Mode 7	0.0	-0.1	0.1	-0.0	0.0	-0.0
	Earthquake Y Mode 8	0.1	-0.2	-0.3	-0.2	-0.2	0.0
	Earthquake Y Mode 9	0.0	-0.2	-0.0	-0.1	-0.0	0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C9	Self weight	1109.6	-5.0	-33.6	-5.4	-36.8	0.0
	Dead load	165.3	-0.8	-4.7	-0.9	-5.1	0.0
	Live load	505.7	-2.8	-20.5	-3.1	-22.5	0.0
	Wind +X ecc.+	-7.2	-3.3	-0.1	-2.2	-0.1	0.0
	Wind +X ecc.-	-6.6	-3.7	1.1	-2.5	0.7	-0.0
	Wind -X ecc.+	7.2	3.3	0.1	2.2	0.1	-0.0
	Wind -X ecc.-	6.6	3.7	-1.1	2.5	-0.7	0.0
	Wind +Y ecc.+	-7.9	-0.9	-4.9	-0.6	-3.4	-0.0
	Wind +Y ecc.-	-10.4	0.8	-10.3	0.5	-7.1	0.0
	Wind -Y ecc.+	7.9	0.9	4.9	0.6	3.4	0.0
	Wind -Y ecc.-	10.4	-0.8	10.3	-0.5	7.1	-0.0
	Earthquake X Mode 1	-16.6	-14.9	15.9	-10.0	10.7	-0.1
	Earthquake X Mode 2	79.1	29.1	3.1	19.5	2.1	-0.1
	Earthquake X Mode 3	-12.9	-0.4	-8.1	-0.3	-5.5	0.0
	Earthquake X Mode 4	0.2	-1.9	2.6	-1.3	1.8	-0.0
	Earthquake X Mode 5	-3.7	4.0	1.2	2.9	0.8	-0.0
	Earthquake X Mode 6	0.5	-0.0	-0.8	-0.0	-0.5	0.0
	Earthquake X Mode 7	-0.1	-0.5	0.9	-0.4	0.7	-0.0
	Earthquake X Mode 8	-0.2	-0.2	-0.6	-0.2	-0.5	0.0
	Earthquake X Mode 9	-0.5	-1.2	-0.1	-0.9	-0.0	0.0
	Earthquake Y Mode 1	-7.5	-6.8	7.2	-4.5	4.8	-0.0
	Earthquake Y Mode 2	24.4	9.0	1.0	6.0	0.7	-0.0
	Earthquake Y Mode 3	-79.5	-2.6	-50.0	-1.9	-33.7	0.1
	Earthquake Y Mode 4	0.0	-0.4	0.5	-0.3	0.4	-0.0
	Earthquake Y Mode 5	-0.7	0.7	0.2	0.5	0.2	-0.0
	Earthquake Y Mode 6	4.2	-0.3	-6.3	-0.2	-4.5	0.0
	Earthquake Y Mode 7	-0.0	-0.1	0.3	-0.1	0.2	-0.0
	Earthquake Y Mode 8	-0.4	-0.6	-1.6	-0.4	-1.2	0.0
	Earthquake Y Mode 9	-0.2	-0.4	-0.0	-0.3	-0.0	0.0
C10	Self weight	967.1	1.9	-31.2	2.2	-34.4	0.0
	Dead load	187.2	-2.0	-4.7	-2.2	-5.1	0.0
	Live load	448.4	1.1	-18.4	1.2	-20.2	0.0
	Wind +X ecc.+	5.6	-3.1	-0.0	-2.0	-0.0	0.0
	Wind +X ecc.-	8.9	-3.5	0.5	-2.3	0.4	-0.0
	Wind -X ecc.+	-5.6	3.1	0.0	2.0	0.0	-0.0
	Wind -X ecc.-	-8.9	3.5	-0.5	2.3	-0.4	0.0
	Wind +Y ecc.+	-54.3	-0.7	-8.5	-0.4	-6.6	-0.0
	Wind +Y ecc.-	-69.4	1.0	-11.0	0.7	-8.6	0.0
	Wind -Y ecc.+	54.3	0.7	8.5	0.4	6.6	0.0
	Wind -Y ecc.-	69.4	-1.0	11.0	-0.7	8.6	-0.0
	Earthquake X Mode 1	46.2	-14.3	4.1	-9.3	3.2	-0.1
	Earthquake X Mode 2	-123.3	27.2	-6.9	17.4	-5.3	-0.1
	Earthquake X Mode 3	-63.1	-0.2	-8.7	-0.1	-6.7	0.0
	Earthquake X Mode 4	-2.7	-1.8	1.1	-1.2	0.9	-0.0
	Earthquake X Mode 5	4.2	3.8	-0.0	2.6	0.0	-0.0
	Earthquake X Mode 6	0.7	-0.0	-0.9	-0.0	-0.8	0.0
	Earthquake X Mode 7	0.3	-0.5	0.5	-0.4	0.4	-0.0
	Earthquake X Mode 8	-0.1	-0.2	-0.8	-0.2	-0.6	0.0
	Earthquake X Mode 9	0.5	-1.2	0.3	-0.9	0.3	0.0
	Earthquake Y Mode 1	21.0	-6.5	1.9	-4.2	1.5	-0.0
	Earthquake Y Mode 2	-38.1	8.4	-2.1	5.4	-1.6	-0.0
	Earthquake Y Mode 3	-388.6	-1.2	-53.4	-0.4	-41.3	0.1
	Earthquake Y Mode 4	-0.5	-0.3	0.2	-0.2	0.2	-0.0
	Earthquake Y Mode 5	0.8	0.7	-0.0	0.5	0.0	-0.0
	Earthquake Y Mode 6	6.1	-0.4	-7.6	-0.2	-6.2	0.0
	Earthquake Y Mode 7	0.1	-0.1	0.2	-0.1	0.1	-0.0
	Earthquake Y Mode 8	-0.4	-0.6	-2.0	-0.4	-1.6	0.0
	Earthquake Y Mode 9	0.2	-0.4	0.1	-0.3	0.1	0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C11	Self weight	761.8	0.0	-5.2	0.1	-5.4	0.0
	Dead load	133.2	0.0	-0.8	0.0	-0.9	0.0
	Live load	385.9	0.0	-3.5	0.0	-3.7	0.0
	Wind +X ecc.+	0.1	-1.3	-0.0	-1.0	-0.0	0.0
	Wind +X ecc.-	0.2	-1.5	0.0	-1.1	0.0	-0.0
	Wind -X ecc.+	-0.1	1.3	0.0	1.0	0.0	-0.0
	Wind -X ecc.-	-0.2	1.5	-0.0	1.1	-0.0	0.0
	Wind +Y ecc.+	-2.4	-0.3	-1.3	-0.2	-0.9	-0.0
	Wind +Y ecc.-	-2.6	0.4	-1.4	0.3	-0.9	0.0
	Wind -Y ecc.+	2.4	0.3	1.3	0.2	0.9	0.0
	Wind -Y ecc.-	2.6	-0.4	1.4	-0.3	0.9	-0.0
	Earthquake X Mode 1	-0.1	-6.1	-0.6	-4.6	-0.3	-0.0
	Earthquake X Mode 2	-4.6	11.9	-1.6	9.0	-1.0	-0.0
	Earthquake X Mode 3	-2.5	-0.1	-1.1	-0.1	-0.7	0.0
	Earthquake X Mode 4	-0.1	-0.7	0.0	-0.5	0.0	-0.0
	Earthquake X Mode 5	0.1	1.5	-0.1	1.2	-0.1	-0.0
	Earthquake X Mode 6	0.1	-0.0	-0.1	-0.0	-0.1	0.0
	Earthquake X Mode 7	0.0	-0.2	0.0	-0.1	0.0	-0.0
	Earthquake X Mode 8	0.0	-0.1	-0.1	-0.1	-0.1	0.0
	Earthquake X Mode 9	0.0	-0.4	0.1	-0.3	0.1	0.0
	Earthquake Y Mode 1	-0.1	-2.8	-0.3	-2.1	-0.2	-0.0
	Earthquake Y Mode 2	-1.4	3.7	-0.5	2.8	-0.3	-0.0
	Earthquake Y Mode 3	-15.4	-0.7	-6.6	-0.4	-4.3	0.0
	Earthquake Y Mode 4	-0.0	-0.1	0.0	-0.1	0.0	-0.0
	Earthquake Y Mode 5	0.0	0.3	-0.0	0.2	-0.0	-0.0
	Earthquake Y Mode 6	1.0	-0.2	-1.0	-0.1	-0.7	0.0
	Earthquake Y Mode 7	0.0	-0.1	0.0	-0.0	0.0	-0.0
	Earthquake Y Mode 8	0.0	-0.2	-0.3	-0.2	-0.2	0.0
	Earthquake Y Mode 9	0.0	-0.2	0.0	-0.1	0.0	0.0
C12	Self weight	1105.0	-2.3	-34.4	-2.4	-38.0	0.0
	Dead load	228.7	2.0	-5.0	2.3	-5.4	0.0
	Live load	505.2	-1.2	-20.9	-1.3	-23.0	0.0
	Wind +X ecc.+	-6.6	-3.2	-0.1	-2.1	-0.1	0.0
	Wind +X ecc.-	-7.7	-3.5	-0.4	-2.3	-0.3	-0.0
	Wind -X ecc.+	6.6	3.2	0.1	2.1	0.1	-0.0
	Wind -X ecc.-	7.7	3.5	0.4	2.3	0.3	0.0
	Wind +Y ecc.+	-10.7	-0.9	-8.2	-0.6	-5.5	-0.0
	Wind +Y ecc.-	-5.9	0.8	-6.6	0.6	-4.5	0.0
	Wind -Y ecc.+	10.7	0.9	8.2	0.6	5.5	0.0
	Wind -Y ecc.-	5.9	-0.8	6.6	-0.6	4.5	-0.0
	Earthquake X Mode 1	-47.8	-14.5	-9.8	-9.6	-6.5	-0.1
	Earthquake X Mode 2	53.7	27.5	-12.6	17.8	-8.0	-0.1
	Earthquake X Mode 3	-8.1	-0.3	-5.3	-0.2	-3.5	0.0
	Earthquake X Mode 4	2.0	-1.8	-0.9	-1.3	-0.6	-0.0
	Earthquake X Mode 5	-3.2	3.8	-1.3	2.7	-0.9	-0.0
	Earthquake X Mode 6	0.3	-0.0	-0.6	-0.0	-0.4	0.0
	Earthquake X Mode 7	-0.2	-0.5	-0.1	-0.4	-0.1	-0.0
	Earthquake X Mode 8	-0.1	-0.2	-0.6	-0.2	-0.5	0.0
	Earthquake X Mode 9	-0.4	-1.2	0.6	-0.9	0.5	0.0
	Earthquake Y Mode 1	-21.7	-6.6	-4.4	-4.4	-3.0	-0.0
	Earthquake Y Mode 2	16.6	8.5	-3.9	5.5	-2.5	-0.0
	Earthquake Y Mode 3	-49.7	-2.0	-32.4	-1.3	-21.7	0.1
	Earthquake Y Mode 4	0.4	-0.3	-0.2	-0.2	-0.1	-0.0
	Earthquake Y Mode 5	-0.6	0.7	-0.2	0.5	-0.2	-0.0
	Earthquake Y Mode 6	2.4	-0.4	-5.1	-0.3	-3.6	0.0
	Earthquake Y Mode 7	-0.1	-0.1	-0.0	-0.1	-0.0	-0.0
	Earthquake Y Mode 8	-0.3	-0.6	-1.6	-0.4	-1.2	0.0
	Earthquake Y Mode 9	-0.2	-0.4	0.2	-0.3	0.2	0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C13	Self weight	917.0	-0.9	-16.6	-1.0	-18.3	0.0
	Dead load	149.5	-0.3	-2.3	-0.3	-2.4	0.0
	Live load	401.6	-0.7	-10.0	-0.7	-11.1	0.0
	Wind +X ecc.+	6.9	-3.5	0.1	-2.5	0.1	0.0
	Wind +X ecc.-	7.9	-3.9	-0.9	-2.8	-0.5	-0.0
	Wind -X ecc.+	-6.9	3.5	-0.1	2.5	-0.1	-0.0
	Wind -X ecc.-	-7.9	3.9	0.9	2.8	0.5	0.0
	Wind +Y ecc.+	3.6	-0.7	-8.8	-0.4	-5.4	-0.0
	Wind +Y ecc.-	-0.9	1.0	-4.3	0.8	-2.7	0.0
	Wind -Y ecc.+	-3.6	0.7	8.8	0.4	5.4	0.0
	Wind -Y ecc.-	0.9	-1.0	4.3	-0.8	2.7	-0.0
	Earthquake X Mode 1	42.1	-15.7	-19.6	-10.8	-11.7	-0.1
	Earthquake X Mode 2	-68.4	31.5	-19.4	22.2	-11.9	-0.1
	Earthquake X Mode 3	1.6	-0.3	-3.4	-0.2	-2.1	0.0
	Earthquake X Mode 4	-1.0	-2.0	-2.3	-1.4	-1.5	-0.0
	Earthquake X Mode 5	2.3	4.3	-2.4	3.1	-1.6	-0.0
	Earthquake X Mode 6	0.0	-0.0	-0.5	-0.0	-0.3	0.0
	Earthquake X Mode 7	0.2	-0.5	-0.5	-0.4	-0.4	-0.0
	Earthquake X Mode 8	0.1	-0.2	-0.6	-0.2	-0.4	0.0
	Earthquake X Mode 9	0.3	-1.3	0.9	-1.0	0.7	0.0
	Earthquake Y Mode 1	19.1	-7.1	-8.9	-4.9	-5.3	-0.0
	Earthquake Y Mode 2	-21.1	9.7	-6.0	6.9	-3.7	-0.0
	Earthquake Y Mode 3	10.0	-1.8	-21.0	-1.0	-12.9	0.1
	Earthquake Y Mode 4	-0.2	-0.4	-0.4	-0.3	-0.3	-0.0
	Earthquake Y Mode 5	0.4	0.8	-0.4	0.6	-0.3	-0.0
	Earthquake Y Mode 6	0.3	-0.4	-4.2	-0.3	-2.8	0.0
	Earthquake Y Mode 7	0.1	-0.2	-0.2	-0.1	-0.1	-0.0
	Earthquake Y Mode 8	0.2	-0.6	-1.5	-0.5	-1.1	0.0
	Earthquake Y Mode 9	0.1	-0.5	0.3	-0.4	0.3	0.0
C14	Self weight	477.5	-4.1	-10.6	-4.3	-11.5	0.0
	Dead load	152.6	-0.5	-2.5	-0.5	-2.6	0.0
	Live load	164.1	-2.7	-6.6	-2.9	-7.1	0.0
	Wind +X ecc.+	21.6	-2.8	0.6	-1.7	0.6	0.0
	Wind +X ecc.-	20.1	-3.0	-0.8	-1.7	-0.1	-0.0
	Wind -X ecc.+	-21.6	2.8	-0.6	1.7	-0.6	-0.0
	Wind -X ecc.-	-20.1	3.0	0.8	1.7	0.1	0.0
	Wind +Y ecc.+	-18.1	0.3	-8.8	0.6	-4.7	-0.0
	Wind +Y ecc.-	-11.0	1.1	-2.3	0.8	-1.2	0.0
	Wind -Y ecc.+	18.1	-0.3	8.8	-0.6	4.7	0.0
	Wind -Y ecc.-	11.0	-1.1	2.3	-0.8	1.2	-0.0
	Earthquake X Mode 1	24.9	-9.9	-25.2	-4.5	-12.2	-0.1
	Earthquake X Mode 2	-302.4	27.1	-28.3	17.2	-18.0	-0.1
	Earthquake X Mode 3	-2.2	-0.0	-1.7	0.1	-0.8	0.0
	Earthquake X Mode 4	-0.8	-1.3	-3.2	-0.7	-1.8	-0.0
	Earthquake X Mode 5	10.1	3.9	-3.8	2.7	-2.6	-0.0
	Earthquake X Mode 6	0.2	0.0	-0.4	0.0	-0.2	0.0
	Earthquake X Mode 7	0.2	-0.4	-0.9	-0.3	-0.6	-0.0
	Earthquake X Mode 8	0.1	-0.2	-0.5	-0.1	-0.3	0.0
	Earthquake X Mode 9	1.1	-1.2	1.3	-0.9	1.0	0.0
	Earthquake Y Mode 1	11.3	-4.5	-11.4	-2.0	-5.5	-0.0
	Earthquake Y Mode 2	-93.4	8.4	-8.8	5.3	-5.5	-0.0
	Earthquake Y Mode 3	-13.4	-0.1	-10.2	0.8	-4.7	0.1
	Earthquake Y Mode 4	-0.2	-0.3	-0.6	-0.1	-0.3	-0.0
	Earthquake Y Mode 5	1.8	0.7	-0.7	0.5	-0.5	-0.0
	Earthquake Y Mode 6	1.8	0.0	-3.1	0.2	-1.8	0.0
	Earthquake Y Mode 7	0.0	-0.1	-0.3	-0.1	-0.2	-0.0
	Earthquake Y Mode 8	0.1	-0.4	-1.2	-0.3	-0.8	0.0
	Earthquake Y Mode 9	0.4	-0.4	0.5	-0.3	0.4	0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C15	Self weight	537.0	19.3	0.5	21.6	1.2	0.0
	Dead load	169.5	2.5	0.2	2.8	0.4	0.0
	Live load	194.3	11.7	0.2	13.0	0.6	0.0
	Wind +X ecc.+	-2.4	-2.3	-0.1	-1.2	-0.1	0.0
	Wind +X ecc.-	-2.5	-2.3	2.0	-1.2	1.4	-0.0
	Wind -X ecc.+	2.4	2.3	0.1	1.2	0.1	-0.0
	Wind -X ecc.-	2.5	2.3	-2.0	1.2	-1.4	0.0
	Wind +Y ecc.+	0.2	0.0	-3.6	0.0	-2.6	-0.0
	Wind +Y ecc.-	0.7	-0.0	-13.2	0.0	-9.5	0.0
	Wind -Y ecc.+	-0.2	-0.0	3.6	-0.0	2.6	0.0
	Wind -Y ecc.-	-0.7	0.0	13.2	-0.0	9.5	-0.0
	Earthquake X Mode 1	-9.2	-5.9	31.3	-2.9	22.1	-0.1
	Earthquake X Mode 2	27.8	23.2	12.1	11.2	8.4	-0.1
	Earthquake X Mode 3	-0.2	-0.7	-10.4	-0.3	-7.4	0.0
	Earthquake X Mode 4	0.2	-0.7	4.6	-0.4	3.4	-0.0
	Earthquake X Mode 5	-1.1	3.4	2.6	1.9	1.9	-0.0
	Earthquake X Mode 6	0.0	-0.1	-0.9	-0.0	-0.7	0.0
	Earthquake X Mode 7	-0.0	-0.2	1.5	-0.1	1.2	-0.0
	Earthquake X Mode 8	0.0	-0.2	-0.7	-0.1	-0.5	0.0
	Earthquake X Mode 9	-0.0	-1.1	-0.4	-0.7	-0.3	0.0
	Earthquake Y Mode 1	-4.2	-2.7	14.2	-1.3	10.0	-0.0
	Earthquake Y Mode 2	8.6	7.2	3.7	3.5	2.6	-0.0
	Earthquake Y Mode 3	-1.4	-4.5	-64.1	-2.1	-45.5	0.1
	Earthquake Y Mode 4	0.0	-0.1	0.9	-0.1	0.6	-0.0
	Earthquake Y Mode 5	-0.2	0.6	0.5	0.3	0.3	-0.0
	Earthquake Y Mode 6	0.2	-0.5	-7.4	-0.3	-5.4	0.0
	Earthquake Y Mode 7	-0.0	-0.1	0.5	-0.0	0.4	-0.0
	Earthquake Y Mode 8	0.0	-0.5	-1.7	-0.3	-1.3	0.0
	Earthquake Y Mode 9	-0.0	-0.4	-0.2	-0.3	-0.1	0.0
C16	Self weight	687.2	-13.6	1.7	-14.7	2.3	0.0
	Dead load	187.8	-1.8	0.1	-1.9	0.3	0.0
	Live load	298.7	-7.8	1.1	-8.4	1.4	0.0
	Wind +X ecc.+	-3.4	-2.7	-0.1	-1.6	-0.0	0.0
	Wind +X ecc.-	-3.4	-2.7	1.1	-1.6	0.8	-0.0
	Wind -X ecc.+	3.4	2.7	0.1	1.6	0.0	-0.0
	Wind -X ecc.-	3.4	2.7	-1.1	1.6	-0.8	0.0
	Wind +Y ecc.+	0.4	0.0	-4.9	0.0	-3.3	-0.0
	Wind +Y ecc.-	0.6	-0.0	-10.4	-0.0	-7.0	0.0
	Wind -Y ecc.+	-0.4	-0.0	4.9	-0.0	3.3	0.0
	Wind -Y ecc.-	-0.6	0.0	10.4	0.0	7.0	-0.0
	Earthquake X Mode 1	-11.2	-6.9	16.3	-4.0	10.9	-0.1
	Earthquake X Mode 2	41.4	27.4	3.1	15.7	2.1	-0.1
	Earthquake X Mode 3	-0.8	-0.9	-8.2	-0.5	-5.5	0.0
	Earthquake X Mode 4	0.4	-0.8	2.6	-0.5	1.8	-0.0
	Earthquake X Mode 5	-1.9	3.9	1.2	2.4	0.8	-0.0
	Earthquake X Mode 6	0.0	-0.1	-0.8	-0.0	-0.5	0.0
	Earthquake X Mode 7	-0.0	-0.2	0.9	-0.1	0.7	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.6	-0.1	-0.5	0.0
	Earthquake X Mode 9	-0.1	-1.2	-0.1	-0.8	-0.0	0.0
	Earthquake Y Mode 1	-5.1	-3.2	7.4	-1.8	4.9	-0.0
	Earthquake Y Mode 2	12.8	8.5	1.0	4.9	0.6	-0.0
	Earthquake Y Mode 3	-4.8	-5.4	-50.4	-3.1	-33.7	0.1
	Earthquake Y Mode 4	0.1	-0.2	0.5	-0.1	0.3	-0.0
	Earthquake Y Mode 5	-0.3	0.7	0.2	0.4	0.2	-0.0
	Earthquake Y Mode 6	0.4	-0.6	-6.3	-0.4	-4.4	0.0
	Earthquake Y Mode 7	-0.0	-0.1	0.3	-0.0	0.2	-0.0
	Earthquake Y Mode 8	-0.1	-0.5	-1.6	-0.4	-1.2	0.0
	Earthquake Y Mode 9	-0.0	-0.4	-0.0	-0.3	-0.0	0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C17	Self weight	496.2	10.4	-1.4	11.8	-1.0	0.0
	Dead load	155.4	1.9	-0.3	2.2	-0.1	0.0
	Live load	167.2	6.3	-0.9	7.1	-0.7	0.0
	Wind +X ecc.+	-3.9	-2.5	-0.1	-1.3	-0.1	0.0
	Wind +X ecc.-	-3.1	-2.2	2.0	-1.2	1.4	-0.0
	Wind -X ecc.+	3.9	2.5	0.1	1.3	0.1	-0.0
	Wind -X ecc.-	3.1	2.2	-2.0	1.2	-1.4	0.0
	Wind +Y ecc.+	0.8	0.6	-3.6	0.3	-2.6	-0.0
	Wind +Y ecc.-	-3.2	-0.8	-13.3	-0.5	-9.6	0.0
	Wind -Y ecc.+	-0.8	-0.6	3.6	-0.3	2.6	0.0
	Wind -Y ecc.-	3.2	0.8	13.3	0.5	9.6	-0.0
	Earthquake X Mode 1	5.0	-1.4	31.6	-0.7	22.4	-0.1
	Earthquake X Mode 2	56.4	27.7	12.2	14.3	8.6	-0.1
	Earthquake X Mode 3	-4.5	-1.4	-10.5	-0.7	-7.5	0.0
	Earthquake X Mode 4	-0.2	-0.1	4.6	-0.0	3.4	-0.0
	Earthquake X Mode 5	-1.6	4.1	2.6	2.4	1.9	-0.0
	Earthquake X Mode 6	0.1	-0.1	-0.9	-0.1	-0.7	0.0
	Earthquake X Mode 7	0.1	0.0	1.5	0.0	1.2	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.7	-0.1	-0.5	0.0
	Earthquake X Mode 9	-0.0	-1.3	-0.4	-0.9	-0.3	0.0
	Earthquake Y Mode 1	2.3	-0.6	14.3	-0.3	10.1	-0.0
	Earthquake Y Mode 2	17.4	8.6	3.8	4.4	2.6	-0.0
	Earthquake Y Mode 3	-27.9	-8.4	-64.6	-4.5	-46.1	0.1
	Earthquake Y Mode 4	-0.0	-0.0	0.9	-0.0	0.7	-0.0
	Earthquake Y Mode 5	-0.3	0.7	0.5	0.4	0.4	-0.0
	Earthquake Y Mode 6	0.5	-0.8	-7.4	-0.5	-5.5	0.0
	Earthquake Y Mode 7	0.0	0.0	0.5	0.0	0.4	-0.0
	Earthquake Y Mode 8	-0.1	-0.5	-1.7	-0.3	-1.3	0.0
	Earthquake Y Mode 9	-0.0	-0.5	-0.2	-0.3	-0.1	0.0
C18	Self weight	692.0	-0.4	-0.7	-0.4	-0.7	0.0
	Dead load	214.8	-0.1	0.4	-0.1	0.4	0.0
	Live load	336.9	-0.4	-0.5	-0.4	-0.5	0.0
	Wind +X ecc.+	1.0	-1.4	-0.0	-1.1	-0.0	0.0
	Wind +X ecc.-	1.0	-1.2	0.3	-0.9	0.2	-0.0
	Wind -X ecc.+	-1.0	1.4	0.0	1.1	0.0	-0.0
	Wind -X ecc.-	-1.0	1.2	-0.3	0.9	-0.2	0.0
	Wind +Y ecc.+	-0.6	0.3	-0.8	0.3	-0.5	-0.0
	Wind +Y ecc.-	-0.3	-0.4	-2.1	-0.3	-1.5	0.0
	Wind -Y ecc.+	0.6	-0.3	0.8	-0.3	0.5	0.0
	Wind -Y ecc.-	0.3	0.4	2.1	0.3	1.5	-0.0
	Earthquake X Mode 1	1.6	-0.8	4.2	-0.6	2.9	-0.0
	Earthquake X Mode 2	-13.6	15.6	1.4	11.9	0.9	-0.0
	Earthquake X Mode 3	0.1	-0.7	-1.7	-0.6	-1.2	0.0
	Earthquake X Mode 4	-0.1	-0.1	0.6	-0.0	0.5	-0.0
	Earthquake X Mode 5	0.3	2.1	0.3	1.6	0.2	-0.0
	Earthquake X Mode 6	0.0	-0.0	-0.1	-0.0	-0.1	0.0
	Earthquake X Mode 7	0.0	0.0	0.2	0.0	0.2	-0.0
	Earthquake X Mode 8	0.0	-0.1	-0.1	-0.1	-0.1	0.0
	Earthquake X Mode 9	0.2	-0.6	-0.0	-0.4	-0.0	0.0
	Earthquake Y Mode 1	0.7	-0.4	1.9	-0.3	1.3	-0.0
	Earthquake Y Mode 2	-4.2	4.8	0.4	3.7	0.3	-0.0
	Earthquake Y Mode 3	0.5	-4.6	-10.3	-3.5	-7.1	0.0
	Earthquake Y Mode 4	-0.0	0.1	-0.0	-0.0	0.1	-0.0
	Earthquake Y Mode 5	0.1	0.4	0.1	0.3	0.0	-0.0
	Earthquake Y Mode 6	0.2	-0.4	-1.2	-0.3	-0.9	0.0
	Earthquake Y Mode 7	0.0	0.0	0.1	0.0	0.0	-0.0
	Earthquake Y Mode 8	0.0	-0.2	-0.3	-0.2	-0.2	0.0
	Earthquake Y Mode 9	0.1	-0.2	-0.0	-0.2	-0.0	0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C19	Self weight	694.6	-4.3	-0.3	-4.5	0.2	0.0
	Dead load	176.2	-0.9	0.1	-0.9	0.2	0.0
	Live load	283.4	-2.3	-0.2	-2.4	0.1	0.0
	Wind +X ecc.+	-7.7	-3.4	-0.0	-2.3	0.0	0.0
	Wind +X ecc.-	-7.2	-3.0	1.2	-2.1	0.8	-0.0
	Wind -X ecc.+	7.7	3.4	0.0	2.3	-0.0	-0.0
	Wind -X ecc.-	7.2	3.0	-1.2	2.1	-0.8	0.0
	Wind +Y ecc.+	4.8	0.9	-4.9	0.7	-3.3	-0.0
	Wind +Y ecc.-	2.4	-0.9	-10.4	-0.5	-7.0	0.0
	Wind -Y ecc.+	-4.8	-0.9	4.9	-0.7	3.3	0.0
	Wind -Y ecc.-	-2.4	0.9	10.4	0.5	7.0	-0.0
	Earthquake X Mode 1	-11.3	-2.2	16.1	-1.5	10.8	-0.1
	Earthquake X Mode 2	104.7	38.2	2.6	25.7	1.6	-0.1
	Earthquake X Mode 3	-0.4	-1.7	-8.1	-1.1	-5.4	0.0
	Earthquake X Mode 4	1.0	-0.1	2.6	-0.1	1.8	-0.0
	Earthquake X Mode 5	-3.2	5.4	1.1	3.8	0.8	-0.0
	Earthquake X Mode 6	-0.2	-0.1	-0.8	-0.1	-0.5	0.0
	Earthquake X Mode 7	-0.1	0.0	0.9	0.0	0.7	-0.0
	Earthquake X Mode 8	0.0	-0.2	-0.6	-0.2	-0.5	0.0
	Earthquake X Mode 9	-0.4	-1.6	-0.1	-1.2	-0.0	0.0
	Earthquake Y Mode 1	-5.1	-1.0	7.3	-0.7	4.9	-0.0
	Earthquake Y Mode 2	32.3	11.8	0.8	7.9	0.5	-0.0
	Earthquake Y Mode 3	-2.2	-10.5	-50.2	-6.8	-33.4	0.1
	Earthquake Y Mode 4	0.2	-0.0	0.5	-0.0	0.3	-0.0
	Earthquake Y Mode 5	-0.6	1.0	0.2	0.7	0.1	-0.0
	Earthquake Y Mode 6	-2.0	-1.0	-6.3	-0.7	-4.4	0.0
	Earthquake Y Mode 7	-0.0	0.0	0.3	0.0	0.2	-0.0
	Earthquake Y Mode 8	0.0	-0.6	-1.6	-0.4	-1.2	0.0
	Earthquake Y Mode 9	-0.2	-0.6	-0.0	-0.4	-0.0	0.0
C20	Self weight	526.5	1.7	5.2	2.0	6.0	0.0
	Dead load	216.0	-1.7	0.9	-1.9	1.1	0.0
	Live load	215.7	0.9	2.9	1.1	3.4	0.0
	Wind +X ecc.+	7.2	-3.0	-0.0	-1.9	-0.0	0.0
	Wind +X ecc.-	4.6	-2.6	0.4	-1.7	0.3	-0.0
	Wind -X ecc.+	-7.2	3.0	0.0	1.9	0.0	-0.0
	Wind -X ecc.-	-4.6	2.6	-0.4	1.7	-0.3	0.0
	Wind +Y ecc.+	38.3	0.7	-7.6	0.4	-5.5	-0.0
	Wind +Y ecc.-	50.5	-1.0	-9.8	-0.7	-7.2	0.0
	Wind -Y ecc.+	-38.3	-0.7	7.6	-0.4	5.5	0.0
	Wind -Y ecc.-	-50.5	1.0	9.8	0.7	7.2	-0.0
	Earthquake X Mode 1	-4.3	-1.5	3.6	-0.8	2.6	-0.1
	Earthquake X Mode 2	-53.1	33.8	-5.9	20.9	-4.1	-0.1
	Earthquake X Mode 3	50.9	-1.7	-7.8	-1.1	-5.6	0.0
	Earthquake X Mode 4	0.9	-0.1	1.0	-0.1	0.8	-0.0
	Earthquake X Mode 5	5.5	4.8	-0.2	3.2	-0.1	-0.0
	Earthquake X Mode 6	-1.2	-0.1	-0.8	-0.1	-0.6	0.0
	Earthquake X Mode 7	-0.2	0.0	0.5	0.0	0.4	-0.0
	Earthquake X Mode 8	0.3	-0.2	-0.7	-0.2	-0.5	0.0
	Earthquake X Mode 9	0.4	-1.4	0.3	-1.0	0.3	0.0
	Earthquake Y Mode 1	-1.9	-0.7	1.6	-0.4	1.2	-0.0
	Earthquake Y Mode 2	-16.4	10.4	-1.8	6.5	-1.3	-0.0
	Earthquake Y Mode 3	313.5	-10.6	-47.9	-7.0	-34.7	0.1
	Earthquake Y Mode 4	0.2	-0.0	0.2	-0.0	0.1	-0.0
	Earthquake Y Mode 5	1.0	0.9	-0.0	0.6	-0.0	-0.0
	Earthquake Y Mode 6	-9.8	-0.9	-6.6	-0.6	-5.0	0.0
	Earthquake Y Mode 7	-0.1	0.0	0.1	0.0	0.1	-0.0
	Earthquake Y Mode 8	0.9	-0.6	-1.7	-0.4	-1.3	0.0
	Earthquake Y Mode 9	0.1	-0.5	0.1	-0.4	0.1	0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C21	Self weight	546.2	-0.0	0.2	-0.0	0.2	0.0
	Dead load	159.9	0.0	0.3	0.0	0.4	0.0
	Live load	270.9	-0.0	0.2	-0.0	0.2	0.0
	Wind +X ecc.+	-0.1	-0.7	0.0	-0.6	0.0	0.0
	Wind +X ecc.-	-0.1	-0.6	0.0	-0.5	0.0	-0.0
	Wind -X ecc.+	0.1	0.7	-0.0	0.6	-0.0	-0.0
	Wind -X ecc.-	0.1	0.6	-0.0	0.5	-0.0	0.0
	Wind +Y ecc.+	0.9	0.2	-1.0	0.1	-0.7	-0.0
	Wind +Y ecc.-	1.0	-0.2	-1.1	-0.2	-0.7	0.0
	Wind -Y ecc.+	-0.9	-0.2	1.0	-0.1	0.7	0.0
	Wind -Y ecc.-	-1.0	0.2	1.1	0.2	0.7	-0.0
	Earthquake X Mode 1	-0.2	-0.4	-0.4	-0.4	-0.3	-0.0
	Earthquake X Mode 2	1.9	7.8	-1.3	6.3	-0.9	-0.0
	Earthquake X Mode 3	1.0	-0.4	-0.8	-0.3	-0.6	0.0
	Earthquake X Mode 4	0.1	-0.0	0.0	-0.0	0.0	-0.0
	Earthquake X Mode 5	-0.1	1.0	-0.1	0.8	-0.1	-0.0
	Earthquake X Mode 6	-0.1	-0.0	-0.1	-0.0	-0.1	0.0
	Earthquake X Mode 7	-0.0	0.0	0.0	0.0	0.0	-0.0
	Earthquake X Mode 8	0.0	-0.0	-0.1	-0.0	-0.1	0.0
	Earthquake X Mode 9	-0.0	-0.3	0.1	-0.2	0.0	0.0
	Earthquake Y Mode 1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.0
	Earthquake Y Mode 2	0.6	2.4	-0.4	1.9	-0.3	-0.0
	Earthquake Y Mode 3	6.0	-2.4	-5.2	-1.9	-3.5	0.0
	Earthquake Y Mode 4	0.0	-0.0	0.0	-0.0	0.0	-0.0
	Earthquake Y Mode 5	-0.0	0.2	-0.0	0.1	-0.0	-0.0
	Earthquake Y Mode 6	-0.5	-0.2	-0.8	-0.1	-0.5	0.0
	Earthquake Y Mode 7	-0.0	0.0	0.0	0.0	0.0	-0.0
	Earthquake Y Mode 8	0.0	-0.1	-0.2	-0.1	-0.2	0.0
	Earthquake Y Mode 9	-0.0	-0.1	0.0	-0.1	0.0	0.0
C22	Self weight	628.0	-2.4	3.9	-2.5	4.5	0.0
	Dead load	287.0	1.7	-0.5	1.9	-0.5	0.0
	Live load	262.9	-1.3	2.4	-1.3	2.7	0.0
	Wind +X ecc.+	-7.1	-3.0	0.1	-1.9	0.1	0.0
	Wind +X ecc.-	-6.1	-2.7	-0.2	-1.7	-0.1	-0.0
	Wind -X ecc.+	7.1	3.0	-0.1	1.9	-0.1	-0.0
	Wind -X ecc.-	6.1	2.7	0.2	1.7	0.1	0.0
	Wind +Y ecc.+	6.9	0.9	-7.9	0.6	-5.2	-0.0
	Wind +Y ecc.-	2.5	-0.9	-6.4	-0.5	-4.2	0.0
	Wind -Y ecc.+	-6.9	-0.9	7.9	-0.6	5.2	0.0
	Wind -Y ecc.-	-2.5	0.9	6.4	0.5	4.2	-0.0
	Earthquake X Mode 1	1.0	-1.5	-9.2	-0.8	-5.7	-0.1
	Earthquake X Mode 2	106.3	34.1	-14.0	21.2	-9.4	-0.1
	Earthquake X Mode 3	-0.3	-1.6	-5.1	-1.0	-3.3	0.0
	Earthquake X Mode 4	-0.0	-0.1	-0.8	-0.1	-0.5	-0.0
	Earthquake X Mode 5	-5.2	4.8	-1.3	3.2	-0.9	-0.0
	Earthquake X Mode 6	-0.1	-0.1	-0.6	-0.1	-0.4	0.0
	Earthquake X Mode 7	-0.0	0.0	-0.1	0.0	-0.0	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.6	-0.2	-0.4	0.0
	Earthquake X Mode 9	-0.5	-1.5	0.6	-1.1	0.5	0.0
	Earthquake Y Mode 1	0.5	-0.7	-4.2	-0.4	-2.6	-0.0
	Earthquake Y Mode 2	32.8	10.5	-4.3	6.6	-2.9	-0.0
	Earthquake Y Mode 3	-2.1	-9.8	-31.2	-6.0	-20.2	0.1
	Earthquake Y Mode 4	-0.0	-0.0	-0.2	-0.0	-0.1	-0.0
	Earthquake Y Mode 5	-0.9	0.9	-0.2	0.6	-0.2	-0.0
	Earthquake Y Mode 6	-0.8	-0.9	-5.0	-0.6	-3.4	0.0
	Earthquake Y Mode 7	-0.0	0.0	-0.0	0.0	-0.0	-0.0
	Earthquake Y Mode 8	-0.1	-0.5	-1.5	-0.4	-1.1	0.0
	Earthquake Y Mode 9	-0.2	-0.5	0.2	-0.4	0.2	0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C23	Self weight	712.2	0.4	-6.4	0.6	-6.9	0.0
	Dead load	183.2	-0.1	-0.8	-0.0	-0.7	0.0
	Live load	297.1	0.2	-3.5	0.3	-3.7	0.0
	Wind +X ecc.+	5.7	-3.5	0.1	-2.4	0.0	0.0
	Wind +X ecc.-	4.9	-3.0	-0.9	-2.1	-0.6	-0.0
	Wind -X ecc.+	-5.7	3.5	-0.1	2.4	-0.0	-0.0
	Wind -X ecc.-	-4.9	3.0	0.9	2.1	0.6	0.0
	Wind +Y ecc.+	-3.8	0.9	-9.0	0.7	-5.7	-0.0
	Wind +Y ecc.-	0.2	-1.0	-4.4	-0.7	-2.8	0.0
	Wind -Y ecc.+	3.8	-0.9	9.0	-0.7	5.7	0.0
	Wind -Y ecc.-	-0.2	1.0	4.4	0.7	2.8	-0.0
	Earthquake X Mode 1	-1.0	-1.8	-20.6	-1.1	-12.7	-0.1
	Earthquake X Mode 2	-82.0	39.1	-20.0	26.7	-12.4	-0.1
	Earthquake X Mode 3	2.5	-1.8	-3.5	-1.3	-2.2	0.0
	Earthquake X Mode 4	-0.5	-0.1	-2.4	-0.1	-1.6	-0.0
	Earthquake X Mode 5	1.6	5.4	-2.4	3.9	-1.6	-0.0
	Earthquake X Mode 6	-0.2	-0.1	-0.5	-0.1	-0.3	0.0
	Earthquake X Mode 7	0.1	0.0	-0.5	0.0	-0.4	-0.0
	Earthquake X Mode 8	0.1	-0.2	-0.6	-0.2	-0.4	0.0
	Earthquake X Mode 9	0.2	-1.6	0.9	-1.2	0.7	0.0
	Earthquake Y Mode 1	-0.5	-0.8	-9.3	-0.5	-5.7	-0.0
	Earthquake Y Mode 2	-25.3	12.1	-6.2	8.2	-3.8	-0.0
	Earthquake Y Mode 3	15.5	-11.4	-21.5	-7.8	-13.3	0.1
	Earthquake Y Mode 4	-0.1	-0.0	-0.5	-0.0	-0.3	-0.0
	Earthquake Y Mode 5	0.3	1.0	-0.4	0.7	-0.3	-0.0
	Earthquake Y Mode 6	-1.3	-0.9	-4.2	-0.7	-2.8	0.0
	Earthquake Y Mode 7	0.0	0.0	-0.2	0.0	-0.1	-0.0
	Earthquake Y Mode 8	0.3	-0.6	-1.4	-0.4	-1.0	0.0
	Earthquake Y Mode 9	0.1	-0.6	0.3	-0.4	0.2	0.0
C24	Self weight	281.9	-1.1	-0.9	-1.0	-1.0	0.0
	Dead load	94.2	-0.0	-1.1	0.0	-1.1	0.0
	Live load	73.6	-0.7	0.1	-0.7	0.1	0.0
	Wind +X ecc.+	27.8	-3.4	-0.1	-2.3	-0.1	0.0
	Wind +X ecc.-	23.9	-3.0	-1.6	-2.1	-1.0	-0.0
	Wind -X ecc.+	-27.8	3.4	0.1	2.3	0.1	-0.0
	Wind -X ecc.-	-23.9	3.0	1.6	2.1	1.0	0.0
	Wind +Y ecc.+	-14.4	0.7	-9.6	0.4	-5.5	-0.0
	Wind +Y ecc.-	3.6	-1.1	-2.4	-0.8	-1.4	0.0
	Wind -Y ecc.+	14.4	-0.7	9.6	-0.4	5.5	0.0
	Wind -Y ecc.-	-3.6	1.1	2.4	0.8	1.4	-0.0
	Earthquake X Mode 1	2.5	-2.3	-29.9	-1.6	-17.3	-0.1
	Earthquake X Mode 2	-386.0	37.5	-23.2	24.9	-12.4	-0.1
	Earthquake X Mode 3	13.8	-1.9	-2.0	-1.3	-1.1	0.0
	Earthquake X Mode 4	-0.6	-0.1	-3.7	-0.1	-2.3	-0.0
	Earthquake X Mode 5	4.4	6.0	-3.1	4.4	-1.9	-0.0
	Earthquake X Mode 6	-0.1	-0.1	-0.4	-0.1	-0.3	0.0
	Earthquake X Mode 7	0.1	0.0	-1.0	0.0	-0.7	-0.0
	Earthquake X Mode 8	0.1	-0.3	-0.5	-0.2	-0.4	0.0
	Earthquake X Mode 9	0.7	-1.7	1.2	-1.3	0.8	0.0
	Earthquake Y Mode 1	1.1	-1.0	-13.6	-0.7	-7.9	-0.0
	Earthquake Y Mode 2	-119.2	11.6	-7.2	7.7	-3.8	-0.0
	Earthquake Y Mode 3	85.2	-11.5	-12.2	-7.9	-6.9	0.1
	Earthquake Y Mode 4	-0.1	-0.0	-0.7	-0.0	-0.4	-0.0
	Earthquake Y Mode 5	0.8	1.1	-0.6	0.8	-0.3	-0.0
	Earthquake Y Mode 6	-1.2	-1.1	-3.4	-0.8	-2.1	0.0
	Earthquake Y Mode 7	0.0	0.0	-0.3	0.0	-0.2	-0.0
	Earthquake Y Mode 8	0.3	-0.6	-1.4	-0.5	-1.0	0.0
	Earthquake Y Mode 9	0.2	-0.6	0.4	-0.5	0.3	0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C25	Self weight	388.6	14.9	-5.7	16.8	-5.7	0.0
	Dead load	146.1	6.4	-1.9	7.1	-1.9	0.0
	Live load	121.1	7.7	-2.7	8.7	-2.6	0.0
	Wind +X ecc.+	-1.4	-2.2	-0.1	-1.0	-0.0	0.0
	Wind +X ecc.-	-4.8	-1.7	1.6	-0.8	1.0	-0.0
	Wind -X ecc.+	1.4	2.2	0.1	1.0	0.0	-0.0
	Wind -X ecc.-	4.8	1.7	-1.6	0.8	-1.0	0.0
	Wind +Y ecc.+	5.1	1.1	-3.0	0.5	-1.9	-0.0
	Wind +Y ecc.-	21.0	-1.2	-10.9	-0.6	-6.9	0.0
	Wind -Y ecc.+	-5.1	-1.1	3.0	-0.5	1.9	0.0
	Wind -Y ecc.-	-21.0	1.2	10.9	0.6	6.9	-0.0
	Earthquake X Mode 1	-67.5	2.9	25.3	1.2	15.4	-0.1
	Earthquake X Mode 2	-7.8	26.9	9.7	11.6	5.8	-0.1
	Earthquake X Mode 3	19.7	-1.6	-8.5	-0.7	-5.2	0.0
	Earthquake X Mode 4	2.4	0.5	3.8	0.2	2.5	-0.0
	Earthquake X Mode 5	0.4	4.0	2.2	2.1	1.4	-0.0
	Earthquake X Mode 6	-0.4	-0.1	-0.8	-0.1	-0.5	0.0
	Earthquake X Mode 7	0.0	0.2	1.3	0.1	1.0	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.6	-0.1	-0.4	0.0
	Earthquake X Mode 9	-0.1	-1.3	-0.4	-0.8	-0.3	0.0
	Earthquake Y Mode 1	-30.6	1.3	11.5	0.5	7.0	-0.0
	Earthquake Y Mode 2	-2.4	8.3	3.0	3.6	1.8	-0.0
	Earthquake Y Mode 3	121.4	-9.9	-52.2	-4.3	-32.3	0.1
	Earthquake Y Mode 4	0.5	0.1	0.7	0.0	0.5	-0.0
	Earthquake Y Mode 5	0.1	0.7	0.4	0.4	0.3	-0.0
	Earthquake Y Mode 6	-3.5	-0.8	-6.2	-0.4	-4.1	0.0
	Earthquake Y Mode 7	0.0	0.1	0.4	0.0	0.3	-0.0
	Earthquake Y Mode 8	-0.0	-0.4	-1.5	-0.3	-1.1	0.0
	Earthquake Y Mode 9	-0.0	-0.5	-0.1	-0.3	-0.1	0.0
C26	Self weight	640.6	-0.8	-8.8	-0.6	-9.2	0.0
	Dead load	249.7	-0.3	-1.5	-0.3	-1.5	0.0
	Live load	245.2	-0.4	-5.1	-0.3	-5.3	0.0
	Wind +X ecc.+	-0.3	-2.6	-0.0	-1.4	0.0	0.0
	Wind +X ecc.-	-2.3	-2.0	1.0	-1.1	0.6	-0.0
	Wind -X ecc.+	0.3	2.6	0.0	1.4	-0.0	-0.0
	Wind -X ecc.-	2.3	2.0	-1.0	1.1	-0.6	0.0
	Wind +Y ecc.+	7.9	1.2	-4.1	0.6	-2.5	-0.0
	Wind +Y ecc.-	17.0	-1.6	-8.7	-1.0	-5.1	0.0
	Wind -Y ecc.+	-7.9	-1.2	4.1	-0.6	2.5	0.0
	Wind -Y ecc.-	-17.0	1.6	8.7	1.0	5.1	-0.0
	Earthquake X Mode 1	-33.7	3.7	13.3	2.1	7.7	-0.1
	Earthquake X Mode 2	-2.4	31.6	2.0	16.8	0.9	-0.1
	Earthquake X Mode 3	16.3	-2.0	-6.8	-1.1	-3.9	0.0
	Earthquake X Mode 4	1.5	0.6	2.2	0.4	1.4	-0.0
	Earthquake X Mode 5	0.3	4.7	1.0	2.8	0.6	-0.0
	Earthquake X Mode 6	-0.4	-0.1	-0.6	-0.1	-0.4	0.0
	Earthquake X Mode 7	-0.0	0.2	0.8	0.2	0.6	-0.0
	Earthquake X Mode 8	0.0	-0.2	-0.6	-0.1	-0.4	0.0
	Earthquake X Mode 9	-0.0	-1.4	-0.0	-1.0	-0.0	0.0
	Earthquake Y Mode 1	-15.3	1.7	6.1	1.0	3.5	-0.0
	Earthquake Y Mode 2	-0.8	9.8	0.6	5.2	0.3	-0.0
	Earthquake Y Mode 3	100.1	-12.4	-41.6	-7.1	-24.1	0.1
	Earthquake Y Mode 4	0.3	0.1	0.4	0.1	0.3	-0.0
	Earthquake Y Mode 5	0.1	0.8	0.2	0.5	0.1	-0.0
	Earthquake Y Mode 6	-3.4	-1.1	-5.3	-0.7	-3.3	0.0
	Earthquake Y Mode 7	-0.0	0.1	0.2	0.1	0.2	-0.0
	Earthquake Y Mode 8	0.0	-0.5	-1.4	-0.4	-1.0	0.0
	Earthquake Y Mode 9	-0.0	-0.5	-0.0	-0.4	-0.0	0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C27	Self weight	643.0	-0.5	-8.9	-0.3	-9.3	0.0
	Dead load	256.9	-0.1	-1.7	-0.1	-1.7	0.0
	Live load	251.4	-0.3	-5.4	-0.2	-5.6	0.0
	Wind +X ecc.+	0.5	-2.5	-0.0	-1.4	-0.0	0.0
	Wind +X ecc.-	-0.1	-2.0	0.3	-1.1	0.2	-0.0
	Wind -X ecc.+	-0.5	2.5	0.0	1.4	0.0	-0.0
	Wind -X ecc.-	0.1	2.0	-0.3	1.1	-0.2	0.0
	Wind +Y ecc.+	10.4	1.3	-5.2	0.7	-2.9	-0.0
	Wind +Y ecc.-	13.1	-1.5	-6.7	-0.9	-3.8	0.0
	Wind -Y ecc.+	-10.4	-1.3	5.2	-0.7	2.9	0.0
	Wind -Y ecc.-	-13.1	1.5	6.7	0.9	3.8	-0.0
	Earthquake X Mode 1	-3.3	3.6	2.6	1.9	1.5	-0.1
	Earthquake X Mode 2	4.4	31.4	-3.7	16.5	-1.8	-0.1
	Earthquake X Mode 3	12.9	-1.9	-5.3	-1.1	-2.9	0.0
	Earthquake X Mode 4	0.6	0.6	0.7	0.3	0.4	-0.0
	Earthquake X Mode 5	0.4	4.6	-0.0	2.7	0.0	-0.0
	Earthquake X Mode 6	-0.4	-0.1	-0.5	-0.1	-0.3	0.0
	Earthquake X Mode 7	-0.0	0.2	0.4	0.2	0.2	-0.0
	Earthquake X Mode 8	0.0	-0.2	-0.5	-0.1	-0.4	0.0
	Earthquake X Mode 9	0.0	-1.4	0.2	-1.0	0.2	0.0
	Earthquake Y Mode 1	-1.5	1.6	1.2	0.9	0.7	-0.0
	Earthquake Y Mode 2	1.4	9.7	-1.1	5.1	-0.5	-0.0
	Earthquake Y Mode 3	79.3	-11.9	-32.6	-6.5	-18.1	0.1
	Earthquake Y Mode 4	0.1	0.1	0.1	0.1	0.1	-0.0
	Earthquake Y Mode 5	0.1	0.8	-0.0	0.5	0.0	-0.0
	Earthquake Y Mode 6	-3.5	-1.0	-4.5	-0.6	-2.7	0.0
	Earthquake Y Mode 7	-0.0	0.1	0.1	0.0	0.1	-0.0
	Earthquake Y Mode 8	0.0	-0.5	-1.3	-0.3	-0.9	0.0
	Earthquake Y Mode 9	0.0	-0.5	0.1	-0.4	0.1	0.0
C28	Self weight	640.7	-0.3	-8.7	-0.1	-9.2	0.0
	Dead load	256.3	-0.1	-1.7	-0.0	-1.7	0.0
	Live load	250.1	-0.2	-5.2	-0.0	-5.5	0.0
	Wind +X ecc.+	-0.4	-2.5	0.0	-1.4	0.0	0.0
	Wind +X ecc.-	0.3	-2.0	-0.2	-1.1	-0.1	-0.0
	Wind -X ecc.+	0.4	2.5	-0.0	1.4	-0.0	-0.0
	Wind -X ecc.-	-0.3	2.0	0.2	1.1	0.1	0.0
	Wind +Y ecc.+	13.5	1.2	-6.5	0.6	-3.6	-0.0
	Wind +Y ecc.-	10.0	-1.5	-5.3	-0.9	-3.0	0.0
	Wind -Y ecc.+	-13.5	-1.2	6.5	-0.6	3.6	0.0
	Wind -Y ecc.-	-10.0	1.5	5.3	0.9	3.0	-0.0
	Earthquake X Mode 1	21.5	3.5	-7.5	1.9	-3.9	-0.1
	Earthquake X Mode 2	33.5	31.4	-10.8	16.5	-5.9	-0.1
	Earthquake X Mode 3	9.3	-2.0	-4.1	-1.1	-2.3	0.0
	Earthquake X Mode 4	-0.4	0.6	-0.7	0.3	-0.4	-0.0
	Earthquake X Mode 5	-0.9	4.6	-1.1	2.7	-0.6	-0.0
	Earthquake X Mode 6	-0.3	-0.1	-0.5	-0.1	-0.3	0.0
	Earthquake X Mode 7	-0.0	0.2	-0.1	0.2	-0.0	-0.0
	Earthquake X Mode 8	-0.0	-0.2	-0.5	-0.1	-0.4	0.0
	Earthquake X Mode 9	-0.0	-1.4	0.5	-1.0	0.4	0.0
	Earthquake Y Mode 1	9.8	1.6	-3.4	0.9	-1.8	-0.0
	Earthquake Y Mode 2	10.3	9.7	-3.3	5.1	-1.8	-0.0
	Earthquake Y Mode 3	57.4	-12.1	-25.4	-6.7	-13.9	0.1
	Earthquake Y Mode 4	-0.1	0.1	-0.1	-0.1	-0.1	-0.0
	Earthquake Y Mode 5	-0.2	0.8	-0.2	0.5	-0.1	-0.0
	Earthquake Y Mode 6	-2.2	-1.0	-4.1	-0.6	-2.5	0.0
	Earthquake Y Mode 7	-0.0	0.1	-0.0	0.0	-0.0	-0.0
	Earthquake Y Mode 8	-0.0	-0.5	-1.3	-0.4	-0.9	0.0
	Earthquake Y Mode 9	-0.0	-0.5	0.2	-0.4	0.1	0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
C29	Self weight	620.5	0.4	-7.1	0.7	-7.6	0.0
	Dead load	246.2	0.2	-1.2	0.3	-1.2	0.0
	Live load	238.8	0.2	-4.3	0.4	-4.6	0.0
	Wind +X ecc.+	0.3	-2.6	-0.0	-1.4	-0.0	0.0
	Wind +X ecc.-	2.6	-1.9	-0.9	-1.0	-0.5	-0.0
	Wind -X ecc.+	-0.3	2.6	0.0	1.4	0.0	-0.0
	Wind -X ecc.-	-2.6	1.9	0.9	1.0	0.5	0.0
	Wind +Y ecc.+	20.1	1.5	-7.9	0.9	-4.4	-0.0
	Wind +Y ecc.-	9.6	-1.4	-3.9	-0.8	-2.2	0.0
	Wind -Y ecc.+	-20.1	-1.5	7.9	-0.9	4.4	0.0
	Wind -Y ecc.-	-9.6	1.4	3.9	0.8	2.2	-0.0
	Earthquake X Mode 1	57.3	4.2	-18.0	2.7	-9.9	-0.1
	Earthquake X Mode 2	49.0	32.0	-16.8	17.2	-9.0	-0.1
	Earthquake X Mode 3	9.2	-1.9	-3.0	-1.0	-1.7	0.0
	Earthquake X Mode 4	-1.7	0.7	-2.1	0.4	-1.3	-0.0
	Earthquake X Mode 5	-1.2	4.7	-2.1	2.8	-1.2	-0.0
	Earthquake X Mode 6	-0.3	-0.1	-0.5	-0.1	-0.3	0.0
	Earthquake X Mode 7	0.1	0.2	-0.5	0.2	-0.3	-0.0
	Earthquake X Mode 8	0.0	-0.2	-0.5	-0.1	-0.4	0.0
	Earthquake X Mode 9	-0.0	-1.5	0.8	-1.0	0.6	0.0
	Earthquake Y Mode 1	26.0	1.9	-8.2	1.2	-4.5	-0.0
	Earthquake Y Mode 2	15.1	9.9	-5.2	5.3	-2.8	-0.0
	Earthquake Y Mode 3	56.6	-11.6	-18.8	-6.2	-10.4	0.1
	Earthquake Y Mode 4	-0.3	0.1	-0.4	0.1	-0.2	-0.0
	Earthquake Y Mode 5	-0.2	0.9	-0.4	0.5	-0.2	-0.0
	Earthquake Y Mode 6	-2.8	-0.9	-3.7	-0.5	-2.3	0.0
	Earthquake Y Mode 7	0.0	0.1	-0.1	0.1	-0.1	-0.0
	Earthquake Y Mode 8	0.1	-0.5	-1.3	-0.3	-0.9	0.0
	Earthquake Y Mode 9	-0.0	-0.5	0.3	-0.4	0.2	0.0
C30	Self weight	364.5	-15.6	-3.8	-16.7	-4.1	0.0
	Dead load	147.3	-6.2	-1.6	-6.7	-1.7	0.0
	Live load	119.7	-8.2	-2.0	-8.8	-2.2	0.0
	Wind +X ecc.+	1.7	-2.2	0.0	-1.0	0.0	0.0
	Wind +X ecc.-	4.4	-1.7	-1.4	-0.8	-0.7	-0.0
	Wind -X ecc.+	-1.7	2.2	-0.0	1.0	-0.0	-0.0
	Wind -X ecc.-	-4.4	1.7	1.4	0.8	0.7	0.0
	Wind +Y ecc.+	19.1	0.8	-8.7	0.2	-4.6	-0.0
	Wind +Y ecc.-	7.0	-1.4	-2.2	-0.8	-1.1	0.0
	Wind -Y ecc.+	-19.1	-0.8	8.7	-0.2	4.6	0.0
	Wind -Y ecc.-	-7.0	1.4	2.2	0.8	1.1	-0.0
	Earthquake X Mode 1	68.0	2.4	-26.7	0.6	-13.9	-0.1
	Earthquake X Mode 2	34.2	26.3	-22.2	10.9	-11.3	-0.1
	Earthquake X Mode 3	7.1	-1.8	-1.8	-0.9	-0.9	0.0
	Earthquake X Mode 4	-2.0	0.4	-3.3	0.2	-2.0	-0.0
	Earthquake X Mode 5	-0.7	4.0	-3.0	2.0	-1.8	-0.0
	Earthquake X Mode 6	-0.3	-0.1	-0.4	-0.1	-0.2	0.0
	Earthquake X Mode 7	0.1	0.2	-0.9	0.1	-0.6	-0.0
	Earthquake X Mode 8	0.0	-0.2	-0.5	-0.1	-0.3	0.0
	Earthquake X Mode 9	-0.0	-1.3	1.1	-0.8	0.7	0.0
	Earthquake Y Mode 1	30.9	1.1	-12.1	0.3	-6.3	-0.0
	Earthquake Y Mode 2	10.6	8.1	-6.9	3.4	-3.5	-0.0
	Earthquake Y Mode 3	44.0	-10.9	-10.8	-5.4	-5.4	0.1
	Earthquake Y Mode 4	-0.4	0.1	-0.6	0.0	-0.4	-0.0
	Earthquake Y Mode 5	-0.1	0.7	-0.5	0.4	-0.3	-0.0
	Earthquake Y Mode 6	-2.3	-1.0	-3.1	-0.6	-1.8	0.0
	Earthquake Y Mode 7	0.0	0.1	-0.3	0.0	-0.2	-0.0
	Earthquake Y Mode 8	0.1	-0.5	-1.3	-0.3	-0.8	0.0
	Earthquake Y Mode 9	-0.0	-0.5	0.4	-0.3	0.3	0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W1	Self weight	781.2	-1.7	10.0	-3.1	10.4	-0.0
	Dead load	160.7	-5.5	1.6	-6.6	1.7	-0.0
	Live load	345.1	-2.0	6.3	-2.4	6.6	-0.0
	Wind +X ecc.+	1.9	41.3	-0.0	14.1	-0.0	0.1
	Wind +X ecc.-	13.0	46.1	-0.6	15.9	-0.5	0.2
	Wind -X ecc.+	-1.9	-41.3	0.0	-14.1	0.0	-0.1
	Wind -X ecc.-	-13.0	-46.1	0.6	-15.9	0.5	-0.2
	Wind +Y ecc.+	-75.7	9.8	4.3	2.6	3.2	0.0
	Wind +Y ecc.-	-126.6	-12.2	7.2	-5.7	5.4	-0.4
	Wind -Y ecc.+	75.7	-9.8	-4.3	-2.6	-3.2	-0.0
	Wind -Y ecc.-	126.6	12.2	-7.2	5.7	-5.4	0.4
	Earthquake X Mode 1	170.4	189.0	-7.9	62.4	-6.0	1.8
	Earthquake X Mode 2	-37.3	-363.0	1.0	-114.7	0.8	-0.6
	Earthquake X Mode 3	-120.8	3.3	5.7	-0.2	4.3	-0.3
	Earthquake X Mode 4	-7.9	23.7	-1.4	10.6	-1.1	0.2
	Earthquake X Mode 5	-3.3	-50.5	-0.4	-21.7	-0.3	-0.1
	Earthquake X Mode 6	3.1	0.5	0.6	0.1	0.4	-0.0
	Earthquake X Mode 7	1.3	6.3	-0.5	3.8	-0.4	0.0
	Earthquake X Mode 8	-1.0	2.9	0.4	1.7	0.3	-0.0
	Earthquake X Mode 9	0.2	15.3	-0.1	9.0	-0.1	0.0
	Earthquake Y Mode 1	77.3	85.8	-3.6	28.3	-2.7	0.8
	Earthquake Y Mode 2	-11.5	-112.1	0.3	-35.4	0.3	-0.2
	Earthquake Y Mode 3	-743.7	20.4	35.1	-1.2	26.4	-1.6
	Earthquake Y Mode 4	-1.5	4.6	-0.3	2.0	-0.2	0.0
	Earthquake Y Mode 5	-0.6	-9.2	-0.1	-3.9	-0.0	-0.0
	Earthquake Y Mode 6	25.9	4.2	4.5	1.0	3.5	-0.1
	Earthquake Y Mode 7	0.4	1.9	-0.1	1.1	-0.1	0.0
	Earthquake Y Mode 8	-2.4	7.3	1.0	4.1	0.8	-0.0
	Earthquake Y Mode 9	0.1	5.6	-0.0	3.3	-0.0	0.0
W2	Self weight	581.2	3.2	-3.5	-0.6	-4.0	-0.2
	Dead load	208.1	-5.1	-1.0	-6.5	-1.2	-0.0
	Live load	225.2	0.9	-2.1	-1.0	-2.4	-0.1
	Wind +X ecc.+	4.7	43.2	0.1	15.1	0.1	-0.1
	Wind +X ecc.-	-6.9	38.0	-0.5	13.1	-0.4	-0.0
	Wind -X ecc.+	-4.7	-43.2	-0.1	-15.1	-0.1	0.1
	Wind -X ecc.-	6.9	-38.0	0.5	-13.1	0.4	0.0
	Wind +Y ecc.+	77.1	-10.5	4.1	-2.7	3.1	0.0
	Wind +Y ecc.-	130.7	13.8	7.0	6.7	5.2	-0.3
	Wind -Y ecc.+	-77.1	10.5	-4.1	2.7	-3.1	-0.0
	Wind -Y ecc.-	-130.7	-13.8	-7.0	-6.7	-5.2	0.3
	Earthquake X Mode 1	-159.9	23.3	-7.4	5.2	-5.5	1.0
	Earthquake X Mode 2	-40.9	-484.7	0.3	-157.1	0.1	2.0
	Earthquake X Mode 3	126.5	24.0	5.5	9.2	4.1	-0.3
	Earthquake X Mode 4	7.6	1.5	-1.3	0.3	-1.0	0.1
	Earthquake X Mode 5	-0.1	-69.0	-0.6	-30.2	-0.5	0.3
	Earthquake X Mode 6	-2.8	1.6	0.5	0.8	0.4	-0.0
	Earthquake X Mode 7	-1.3	-0.3	-0.5	-0.3	-0.4	0.0
	Earthquake X Mode 8	1.0	3.2	0.4	1.9	0.3	-0.0
	Earthquake X Mode 9	-0.3	20.5	-0.0	12.0	-0.0	-0.1
	Earthquake Y Mode 1	-72.5	10.6	-3.4	2.4	-2.5	0.5
	Earthquake Y Mode 2	-12.6	-149.7	0.1	-48.5	0.0	0.6
	Earthquake Y Mode 3	778.8	147.7	34.0	56.8	25.2	-1.9
	Earthquake Y Mode 4	1.5	0.3	-0.3	0.1	-0.2	0.0
	Earthquake Y Mode 5	-0.0	-12.6	-0.1	-5.5	-0.1	0.1
	Earthquake Y Mode 6	-23.0	13.4	4.4	6.8	3.4	-0.2
	Earthquake Y Mode 7	-0.4	-0.1	-0.1	-0.1	-0.1	0.0
	Earthquake Y Mode 8	2.5	7.9	1.0	4.8	0.8	-0.0
	Earthquake Y Mode 9	-0.1	7.5	-0.0	4.4	-0.0	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W3	Self weight	187.7	-0.0	7.0	-0.0	3.4	-0.1
	Dead load	38.0	0.0	2.4	0.0	1.2	-0.0
	Live load	32.3	-0.0	3.8	-0.0	1.5	-0.1
	Wind +X ecc.+	-9.2	1.0	-0.6	0.5	-0.8	-0.0
	Wind +X ecc.-	-5.2	1.1	-6.6	0.5	-4.0	-0.0
	Wind -X ecc.+	9.2	-1.0	0.6	-0.5	0.8	0.0
	Wind -X ecc.-	5.2	-1.1	6.6	-0.5	4.0	0.0
	Wind +Y ecc.+	-36.3	0.1	37.8	0.1	19.5	0.2
	Wind +Y ecc.-	-54.9	-0.2	65.5	-0.1	34.3	0.1
	Wind -Y ecc.+	36.3	-0.1	-37.8	-0.1	-19.5	-0.2
	Wind -Y ecc.-	54.9	0.2	-65.5	0.1	-34.3	-0.1
	Earthquake X Mode 1	26.4	3.8	-77.0	1.7	-41.3	0.2
	Earthquake X Mode 2	91.7	-9.1	10.7	-4.3	9.4	0.5
	Earthquake X Mode 3	-55.7	0.2	50.9	0.1	25.5	0.1
	Earthquake X Mode 4	-1.4	0.5	-13.5	0.3	-8.1	0.0
	Earthquake X Mode 5	-4.5	-1.3	-3.6	-0.7	-1.6	0.1
	Earthquake X Mode 6	1.1	0.0	5.1	0.0	3.0	0.0
	Earthquake X Mode 7	0.4	0.1	-5.2	0.1	-3.6	0.0
	Earthquake X Mode 8	-0.7	0.1	4.4	0.0	3.0	0.0
	Earthquake X Mode 9	-0.8	0.4	-0.8	0.3	-0.6	-0.0
	Earthquake Y Mode 1	12.0	1.7	-34.9	0.8	-18.7	0.1
	Earthquake Y Mode 2	28.3	-2.8	3.3	-1.3	2.9	0.2
	Earthquake Y Mode 3	-342.6	1.0	313.3	0.5	157.2	0.7
	Earthquake Y Mode 4	-0.3	0.1	-2.6	0.1	-1.6	0.0
	Earthquake Y Mode 5	-0.8	-0.2	-0.7	-0.1	-0.3	0.0
	Earthquake Y Mode 6	8.9	0.1	42.2	0.0	24.7	0.1
	Earthquake Y Mode 7	0.1	0.0	-1.6	0.0	-1.1	0.0
	Earthquake Y Mode 8	-1.8	0.2	11.0	0.1	7.5	0.0
	Earthquake Y Mode 9	-0.3	0.2	-0.3	0.1	-0.2	-0.0
W7	Self weight	182.7	0.2	6.9	0.2	3.3	0.0
	Dead load	62.9	-0.2	2.0	-0.3	0.8	-0.0
	Live load	26.5	0.1	3.7	0.1	1.4	0.0
	Wind +X ecc.+	0.2	1.0	1.1	0.5	1.0	-0.0
	Wind +X ecc.-	5.5	1.1	-4.3	0.5	-1.8	0.0
	Wind -X ecc.+	-0.2	-1.0	-1.1	-0.5	-1.0	0.0
	Wind -X ecc.-	-5.5	-1.1	4.3	-0.5	1.8	-0.0
	Wind +Y ecc.+	-33.0	0.2	39.2	0.1	20.5	-0.1
	Wind +Y ecc.-	-57.1	-0.1	64.3	0.0	33.6	-0.3
	Wind -Y ecc.+	33.0	-0.2	-39.2	-0.1	-20.5	0.1
	Wind -Y ecc.-	57.1	0.1	-64.3	-0.0	-33.6	0.3
	Earthquake X Mode 1	79.8	3.8	-62.5	1.7	-30.1	0.6
	Earthquake X Mode 2	-3.9	-9.3	-0.7	-4.5	-4.8	0.6
	Earthquake X Mode 3	-54.3	0.2	50.5	0.2	25.6	-0.2
	Earthquake X Mode 4	-2.9	0.5	-11.8	0.2	-6.8	0.1
	Earthquake X Mode 5	-2.5	-1.3	-4.6	-0.7	-3.0	0.1
	Earthquake X Mode 6	1.1	0.0	5.1	0.0	3.0	-0.0
	Earthquake X Mode 7	0.9	0.1	-4.8	0.1	-3.2	0.0
	Earthquake X Mode 8	-0.5	0.1	4.5	0.1	3.1	-0.0
	Earthquake X Mode 9	0.5	0.4	-0.7	0.3	-0.4	-0.0
	Earthquake Y Mode 1	36.2	1.7	-28.3	0.8	-13.7	0.3
	Earthquake Y Mode 2	-1.2	-2.9	-0.2	-1.4	-1.5	0.2
	Earthquake Y Mode 3	-334.5	1.5	311.1	0.9	157.4	-1.5
	Earthquake Y Mode 4	-0.6	0.1	-2.3	0.0	-1.3	0.0
	Earthquake Y Mode 5	-0.4	-0.2	-0.8	-0.1	-0.5	0.0
	Earthquake Y Mode 6	9.4	0.2	42.1	0.2	24.7	-0.1
	Earthquake Y Mode 7	0.3	0.0	-1.4	0.0	-1.0	0.0
	Earthquake Y Mode 8	-1.3	0.2	11.2	0.1	7.6	-0.0
	Earthquake Y Mode 9	0.2	0.2	-0.2	0.1	-0.2	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W8	Self weight	184.6	-0.3	6.4	-0.3	3.3	-0.0
	Dead load	80.0	-0.3	1.1	-0.3	-0.2	0.0
	Live load	31.4	-0.2	4.0	-0.2	2.1	-0.0
	Wind +X ecc.+	-15.5	1.7	0.7	1.2	0.7	-0.1
	Wind +X ecc.-	-17.2	1.7	-4.8	1.2	-2.3	-0.1
	Wind -X ecc.+	15.5	-1.7	-0.7	-1.2	-0.7	0.1
	Wind -X ecc.-	17.2	-1.7	4.8	-1.2	2.3	0.1
	Wind +Y ecc.+	11.7	0.3	40.0	0.2	21.4	-0.1
	Wind +Y ecc.-	19.4	0.2	65.9	0.2	35.4	-0.3
	Wind -Y ecc.+	-11.7	-0.3	-40.0	-0.2	-21.4	0.1
	Wind -Y ecc.-	-19.4	-0.2	-65.9	-0.2	-35.4	0.3
	Earthquake X Mode 1	-69.2	4.8	-66.2	3.3	-34.0	0.4
	Earthquake X Mode 2	185.1	-16.2	2.1	-11.6	-2.3	1.6
	Earthquake X Mode 3	11.1	0.7	51.9	0.6	27.1	-0.3
	Earthquake X Mode 4	-2.0	0.6	-12.1	0.4	-7.2	0.1
	Earthquake X Mode 5	-2.5	-2.2	-4.3	-1.6	-2.7	0.2
	Earthquake X Mode 6	0.9	0.1	5.2	0.0	3.1	-0.0
	Earthquake X Mode 7	0.0	0.1	-4.8	0.1	-3.3	0.0
	Earthquake X Mode 8	-0.0	0.1	4.5	0.1	3.1	-0.0
	Earthquake X Mode 9	-0.0	0.6	-0.7	0.5	-0.5	-0.0
	Earthquake Y Mode 1	-31.4	2.2	-30.0	1.5	-15.4	0.2
	Earthquake Y Mode 2	57.2	-5.0	0.6	-3.6	-0.7	0.5
	Earthquake Y Mode 3	68.2	4.2	319.5	3.5	166.7	-1.8
	Earthquake Y Mode 4	-0.4	0.1	-2.3	0.1	-1.4	0.0
	Earthquake Y Mode 5	-0.4	-0.4	-0.8	-0.3	-0.5	0.0
	Earthquake Y Mode 6	7.6	0.4	42.4	0.4	25.1	-0.2
	Earthquake Y Mode 7	0.0	0.0	-1.4	0.0	-1.0	0.0
	Earthquake Y Mode 8	-0.0	0.3	11.2	0.2	7.7	-0.0
	Earthquake Y Mode 9	-0.0	0.2	-0.3	0.2	-0.2	-0.0
W9	Self weight	184.9	-0.3	6.8	-0.4	3.7	-0.0
	Dead load	79.2	-0.3	2.6	-0.3	1.4	0.0
	Live load	30.9	-0.2	4.1	-0.2	2.2	-0.0
	Wind +X ecc.+	-16.4	1.7	0.1	1.2	-0.0	-0.1
	Wind +X ecc.-	-14.1	1.6	-5.5	1.1	-3.1	-0.0
	Wind -X ecc.+	16.4	-1.7	-0.1	-1.2	0.0	0.1
	Wind -X ecc.-	14.1	-1.6	5.5	-1.1	3.1	0.0
	Wind +Y ecc.+	-13.3	-0.1	40.1	-0.1	21.4	-0.0
	Wind +Y ecc.-	-23.8	0.1	66.2	0.1	35.5	-0.3
	Wind -Y ecc.+	13.3	0.1	-40.1	0.1	-21.4	0.0
	Wind -Y ecc.-	23.8	-0.1	-66.2	-0.1	-35.5	0.3
	Earthquake X Mode 1	-16.7	3.4	-68.5	2.4	-36.2	0.6
	Earthquake X Mode 2	193.1	-17.3	9.7	-12.3	5.5	0.9
	Earthquake X Mode 3	-27.0	0.6	51.9	0.4	26.9	-0.2
	Earthquake X Mode 4	2.7	0.4	-12.3	0.3	-7.3	0.1
	Earthquake X Mode 5	-1.0	-2.4	-4.1	-1.7	-2.5	0.1
	Earthquake X Mode 6	-0.8	0.0	5.2	0.0	3.1	-0.0
	Earthquake X Mode 7	-0.0	0.1	-4.9	0.1	-3.3	0.0
	Earthquake X Mode 8	-0.1	0.1	4.5	0.1	3.1	-0.0
	Earthquake X Mode 9	-0.1	0.7	-0.8	0.5	-0.5	-0.0
	Earthquake Y Mode 1	-7.6	1.5	-31.1	1.1	-16.5	0.3
	Earthquake Y Mode 2	59.6	-5.3	3.0	-3.8	1.7	0.3
	Earthquake Y Mode 3	-166.4	3.8	319.1	2.7	165.6	-1.4
	Earthquake Y Mode 4	0.5	0.1	-2.4	0.1	-1.4	0.0
	Earthquake Y Mode 5	-0.2	-0.4	-0.8	-0.3	-0.5	0.0
	Earthquake Y Mode 6	-6.4	0.4	42.6	0.3	25.2	-0.1
	Earthquake Y Mode 7	-0.0	0.0	-1.5	0.0	-1.0	0.0
	Earthquake Y Mode 8	-0.2	0.3	11.2	0.2	7.7	-0.0
	Earthquake Y Mode 9	-0.0	0.2	-0.3	0.2	-0.2	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W10	Self weight	205.0	-0.4	5.5	-0.5	2.6	-0.0
	Dead load	77.5	-0.3	1.6	-0.3	0.5	0.0
	Live load	41.8	-0.3	3.7	-0.4	1.9	-0.0
	Wind +X ecc.+	-0.1	1.0	-0.7	0.5	-0.8	0.0
	Wind +X ecc.-	-5.3	1.0	-6.1	0.5	-3.6	0.1
	Wind -X ecc.+	0.1	-1.0	0.7	-0.5	0.8	-0.0
	Wind -X ecc.-	5.3	-1.0	6.1	-0.5	3.6	-0.1
	Wind +Y ecc.+	32.7	-0.2	39.2	-0.1	20.5	-0.0
	Wind +Y ecc.-	56.3	0.1	64.1	0.0	33.4	-0.2
	Wind -Y ecc.+	-32.7	0.2	-39.2	0.1	-20.5	0.0
	Wind -Y ecc.-	-56.3	-0.1	-64.1	-0.0	-33.4	0.2
	Earthquake X Mode 1	-78.1	1.4	-66.9	0.8	-34.8	0.8
	Earthquake X Mode 2	6.5	-11.1	18.4	-5.5	14.7	-0.1
	Earthquake X Mode 3	53.4	0.4	49.8	0.2	24.9	-0.2
	Earthquake X Mode 4	3.3	0.2	-12.1	0.1	-7.1	0.1
	Earthquake X Mode 5	-0.8	-1.6	-3.1	-0.9	-1.4	0.0
	Earthquake X Mode 6	-1.0	0.0	5.1	0.0	3.0	-0.0
	Earthquake X Mode 7	-0.7	0.0	-4.8	0.0	-3.2	0.0
	Earthquake X Mode 8	0.6	0.1	4.4	0.0	3.0	-0.0
	Earthquake X Mode 9	0.3	0.5	-1.0	0.3	-0.7	-0.0
	Earthquake Y Mode 1	-35.4	0.6	-30.4	0.4	-15.8	0.4
	Earthquake Y Mode 2	2.0	-3.4	5.7	-1.7	4.5	-0.0
	Earthquake Y Mode 3	328.6	2.6	306.7	1.0	153.3	-1.1
	Earthquake Y Mode 4	0.6	0.0	-2.3	0.0	-1.4	0.0
	Earthquake Y Mode 5	-0.1	-0.3	-0.6	-0.2	-0.2	0.0
	Earthquake Y Mode 6	-8.2	0.2	41.8	0.1	24.4	-0.1
	Earthquake Y Mode 7	-0.2	0.0	-1.4	0.0	-1.0	0.0
	Earthquake Y Mode 8	1.6	0.2	10.9	0.1	7.4	-0.0
	Earthquake Y Mode 9	0.1	0.2	-0.4	0.1	-0.3	-0.0
W4	Self weight	195.8	1.2	6.1	1.3	2.9	-0.1
	Dead load	40.1	0.2	2.0	0.2	0.9	-0.0
	Live load	42.8	0.8	3.7	0.9	1.8	-0.1
	Wind +X ecc.+	-2.4	1.0	0.2	0.5	0.1	-0.0
	Wind +X ecc.-	-4.7	1.1	-5.8	0.5	-3.1	0.0
	Wind -X ecc.+	2.4	-1.0	-0.2	-0.5	-0.1	0.0
	Wind -X ecc.-	4.7	-1.1	5.8	-0.5	3.1	-0.0
	Wind +Y ecc.+	13.7	0.0	38.8	0.0	20.7	0.2
	Wind +Y ecc.-	24.3	-0.1	66.6	-0.0	35.7	0.1
	Wind -Y ecc.+	-13.7	-0.0	-38.8	-0.0	-20.7	-0.2
	Wind -Y ecc.-	-24.3	0.1	-66.6	0.0	-35.7	-0.1
	Earthquake X Mode 1	-41.8	3.2	-74.9	1.6	-39.4	0.3
	Earthquake X Mode 2	33.6	-10.0	3.5	-5.0	1.9	0.4
	Earthquake X Mode 3	20.4	0.3	52.2	0.1	27.1	0.1
	Earthquake X Mode 4	-0.2	0.4	-13.1	0.2	-7.7	0.0
	Earthquake X Mode 5	-6.8	-1.4	-4.7	-0.8	-2.8	0.0
	Earthquake X Mode 6	0.9	0.0	5.2	0.0	3.1	0.0
	Earthquake X Mode 7	-0.3	0.1	-5.1	0.1	-3.5	0.0
	Earthquake X Mode 8	-0.1	0.1	4.4	0.1	3.0	0.0
	Earthquake X Mode 9	-0.8	0.5	-0.6	0.3	-0.4	-0.0
	Earthquake Y Mode 1	-18.9	1.4	-34.0	0.7	-17.9	0.1
	Earthquake Y Mode 2	10.4	-3.1	1.1	-1.5	0.6	0.1
	Earthquake Y Mode 3	125.6	1.6	321.5	0.7	167.1	0.6
	Earthquake Y Mode 4	-0.0	0.1	-2.5	0.0	-1.5	0.0
	Earthquake Y Mode 5	-1.2	-0.3	-0.9	-0.1	-0.5	0.0
	Earthquake Y Mode 6	7.7	0.2	42.5	0.1	25.1	0.1
	Earthquake Y Mode 7	-0.1	0.0	-1.5	0.0	-1.0	0.0
	Earthquake Y Mode 8	-0.3	0.2	11.1	0.1	7.6	0.0
	Earthquake Y Mode 9	-0.3	0.2	-0.2	0.1	-0.1	-0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W5	Self weight	202.7	1.6	6.9	1.7	3.8	0.0
	Dead load	39.7	0.3	2.0	0.3	0.8	0.0
	Live load	44.8	1.1	4.3	1.2	2.4	0.0
	Wind +X ecc.+	-2.8	1.0	0.3	0.5	0.2	0.0
	Wind +X ecc.-	-0.5	1.0	-5.7	0.5	-3.0	0.0
	Wind -X ecc.+	2.8	-1.0	-0.3	-0.5	-0.2	-0.0
	Wind -X ecc.-	0.5	-1.0	5.7	-0.5	3.0	-0.0
	Wind +Y ecc.+	-13.6	-0.1	38.8	-0.0	20.7	0.2
	Wind +Y ecc.-	-24.5	0.1	66.6	0.1	35.7	0.1
	Wind -Y ecc.+	13.6	0.1	-38.8	0.0	-20.7	-0.2
	Wind -Y ecc.-	24.5	-0.1	-66.6	-0.1	-35.7	-0.1
	Earthquake X Mode 1	25.5	2.1	-74.6	1.0	-39.1	0.3
	Earthquake X Mode 2	39.2	-10.6	2.0	-5.3	0.5	0.3
	Earthquake X Mode 3	-23.0	0.4	52.3	0.2	27.2	0.1
	Earthquake X Mode 4	2.7	0.3	-13.1	0.1	-7.7	0.0
	Earthquake X Mode 5	-6.3	-1.5	-4.6	-0.9	-2.7	0.0
	Earthquake X Mode 6	-0.6	0.0	5.1	0.0	3.0	0.0
	Earthquake X Mode 7	-0.1	0.1	-5.1	0.0	-3.5	0.0
	Earthquake X Mode 8	-0.2	0.1	4.4	0.0	3.0	0.0
	Earthquake X Mode 9	-0.9	0.5	-0.6	0.3	-0.4	-0.0
	Earthquake Y Mode 1	11.6	1.0	-33.8	0.5	-17.7	0.2
	Earthquake Y Mode 2	12.1	-3.3	0.6	-1.6	0.2	0.1
	Earthquake Y Mode 3	-141.7	2.5	321.9	1.3	167.4	0.6
	Earthquake Y Mode 4	0.5	0.0	-2.5	0.0	-1.5	0.0
	Earthquake Y Mode 5	-1.1	-0.3	-0.8	-0.2	-0.5	0.0
	Earthquake Y Mode 6	-5.0	0.2	42.4	0.1	25.0	0.1
	Earthquake Y Mode 7	-0.0	0.0	-1.5	0.0	-1.0	0.0
	Earthquake Y Mode 8	-0.4	0.2	11.0	0.1	7.5	0.0
	Earthquake Y Mode 9	-0.3	0.2	-0.2	0.1	-0.2	-0.0
W6	Self weight	220.9	1.1	5.3	1.1	2.1	0.1
	Dead load	57.4	0.1	0.9	0.1	-0.3	0.0
	Live load	49.8	0.7	3.8	0.7	1.9	0.1
	Wind +X ecc.+	-10.2	1.0	1.4	0.5	1.3	0.0
	Wind +X ecc.-	-13.2	0.9	-4.8	0.4	-2.1	0.0
	Wind -X ecc.+	10.2	-1.0	-1.4	-0.5	-1.3	-0.0
	Wind -X ecc.-	13.2	-0.9	4.8	-0.4	2.1	-0.0
	Wind +Y ecc.+	31.5	-0.2	38.8	-0.1	20.6	0.2
	Wind +Y ecc.-	45.2	0.2	67.5	0.1	36.4	0.1
	Wind -Y ecc.+	-31.5	0.2	-38.8	0.1	-20.6	-0.2
	Wind -Y ecc.-	-45.2	-0.2	-67.5	-0.1	-36.4	-0.1
	Earthquake X Mode 1	-69.3	1.3	-74.5	0.6	-38.7	0.4
	Earthquake X Mode 2	143.7	-10.6	-9.9	-4.8	-12.3	0.2
	Earthquake X Mode 3	39.7	0.4	53.2	0.2	27.9	0.1
	Earthquake X Mode 4	3.8	0.1	-13.4	0.1	-8.0	0.0
	Earthquake X Mode 5	-2.7	-1.5	-6.5	-0.8	-4.7	0.0
	Earthquake X Mode 6	-1.2	0.0	5.3	0.0	3.2	0.0
	Earthquake X Mode 7	-0.8	0.0	-5.2	0.0	-3.6	0.0
	Earthquake X Mode 8	0.4	0.1	4.5	0.1	3.2	0.0
	Earthquake X Mode 9	-1.1	0.5	-0.3	0.3	-0.1	-0.0
	Earthquake Y Mode 1	-31.5	0.6	-33.8	0.3	-17.6	0.2
	Earthquake Y Mode 2	44.4	-3.3	-3.0	-1.5	-3.8	0.1
	Earthquake Y Mode 3	244.1	2.7	327.3	1.2	171.7	0.5
	Earthquake Y Mode 4	0.7	0.0	-2.6	0.0	-1.5	0.0
	Earthquake Y Mode 5	-0.5	-0.3	-1.2	-0.1	-0.9	0.0
	Earthquake Y Mode 6	-9.8	0.3	43.8	0.2	26.5	0.1
	Earthquake Y Mode 7	-0.2	0.0	-1.6	0.0	-1.1	0.0
	Earthquake Y Mode 8	1.0	0.2	11.4	0.1	7.9	0.0
	Earthquake Y Mode 9	-0.4	0.2	-0.1	0.1	-0.0	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W39	Self weight	240.6	1.3	0.2	0.3	0.1	-0.0
	Dead load	115.5	0.1	-0.2	-0.1	-0.3	-0.0
	Live load	61.0	0.5	0.2	0.2	0.2	-0.0
	Wind +X ecc.+	-12.0	21.9	0.1	10.8	0.1	-0.0
	Wind +X ecc.-	-12.0	22.2	-0.2	11.0	-0.1	0.0
	Wind -X ecc.+	12.0	-21.9	-0.1	-10.8	-0.1	0.0
	Wind -X ecc.-	12.0	-22.2	0.2	-11.0	0.1	-0.0
	Wind +Y ecc.+	-0.1	1.4	2.7	0.9	1.8	0.1
	Wind +Y ecc.-	0.0	-0.3	4.0	0.2	2.7	0.0
	Wind -Y ecc.+	0.1	-1.4	-2.7	-0.9	-1.8	-0.1
	Wind -Y ecc.-	-0.0	0.3	-4.0	-0.2	-2.7	-0.0
	Earthquake X Mode 1	-36.7	63.3	-2.9	29.9	-1.9	0.5
	Earthquake X Mode 2	140.3	-212.9	0.7	-101.3	0.2	0.4
	Earthquake X Mode 3	-4.2	6.5	3.2	3.3	2.2	0.0
	Earthquake X Mode 4	0.3	7.8	-0.6	4.3	-0.4	0.1
	Earthquake X Mode 5	-0.8	-30.6	-0.2	-17.2	-0.2	0.1
	Earthquake X Mode 6	-0.1	0.6	0.3	0.3	0.2	0.0
	Earthquake X Mode 7	-0.1	1.9	-0.2	1.3	-0.2	0.0
	Earthquake X Mode 8	-0.1	1.6	0.3	1.1	0.2	0.0
	Earthquake X Mode 9	-0.6	9.2	-0.1	6.1	-0.0	-0.0
	Earthquake Y Mode 1	-16.6	28.7	-1.3	13.6	-0.9	0.2
	Earthquake Y Mode 2	43.3	-65.8	0.2	-31.3	0.1	0.1
	Earthquake Y Mode 3	-25.7	39.9	19.7	20.6	13.3	0.2
	Earthquake Y Mode 4	0.1	1.5	-0.1	0.8	-0.1	0.0
	Earthquake Y Mode 5	-0.1	-5.6	-0.0	-3.1	-0.0	0.0
	Earthquake Y Mode 6	-1.2	4.6	2.6	2.8	1.8	0.0
	Earthquake Y Mode 7	-0.0	0.6	-0.1	0.4	-0.1	0.0
	Earthquake Y Mode 8	-0.3	4.1	0.7	2.7	0.5	0.0
	Earthquake Y Mode 9	-0.2	3.4	-0.0	2.2	-0.0	-0.0
W41	Self weight	422.3	-15.3	0.9	-18.2	0.8	0.2
	Dead load	129.7	-0.1	0.1	-0.5	0.1	0.0
	Live load	134.5	-8.5	0.5	-9.9	0.4	0.1
	Wind +X ecc.+	20.0	37.0	0.2	14.3	0.3	0.1
	Wind +X ecc.-	21.6	35.4	-0.0	13.6	0.1	0.1
	Wind -X ecc.+	-20.0	-37.0	-0.2	-14.3	-0.3	-0.1
	Wind -X ecc.-	-21.6	-35.4	0.0	-13.6	-0.1	-0.1
	Wind +Y ecc.+	-43.4	-1.2	4.1	1.3	3.0	0.4
	Wind +Y ecc.-	-50.8	6.0	5.4	4.6	4.0	0.3
	Wind -Y ecc.+	43.4	1.2	-4.1	-1.3	-3.0	-0.4
	Wind -Y ecc.-	50.8	-6.0	-5.4	-4.6	-4.0	-0.3
	Earthquake X Mode 1	63.8	70.9	-1.7	24.6	-1.0	0.8
	Earthquake X Mode 2	-292.3	-381.2	0.8	-136.9	-0.3	0.2
	Earthquake X Mode 3	-38.3	16.0	4.4	7.7	3.2	0.3
	Earthquake X Mode 4	-0.4	8.2	-0.5	3.7	-0.4	0.1
	Earthquake X Mode 5	8.2	-54.8	-0.3	-25.9	-0.3	0.0
	Earthquake X Mode 6	-1.0	1.2	0.4	0.7	0.3	0.0
	Earthquake X Mode 7	0.3	1.7	-0.2	1.0	-0.2	0.0
	Earthquake X Mode 8	0.0	2.8	0.4	1.8	0.3	0.0
	Earthquake X Mode 9	1.4	16.4	-0.1	10.0	-0.1	-0.0
	Earthquake Y Mode 1	28.9	32.2	-0.8	11.2	-0.5	0.4
	Earthquake Y Mode 2	-90.3	-117.8	0.3	-42.3	-0.1	0.1
	Earthquake Y Mode 3	-235.7	98.8	27.0	47.5	19.7	1.6
	Earthquake Y Mode 4	-0.1	1.6	-0.1	0.7	-0.1	0.0
	Earthquake Y Mode 5	1.5	-10.0	-0.0	-4.7	-0.1	0.0
	Earthquake Y Mode 6	-8.2	10.1	3.6	6.1	2.7	0.2
	Earthquake Y Mode 7	0.1	0.5	-0.1	0.3	-0.1	0.0
	Earthquake Y Mode 8	0.0	7.1	0.9	4.6	0.7	0.0
	Earthquake Y Mode 9	0.5	6.0	-0.0	3.7	-0.0	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W42	Self weight	424.4	-16.7	0.1	-19.5	-0.1	-0.1
	Dead load	128.7	-0.2	0.2	-0.5	0.1	-0.0
	Live load	134.8	-9.3	0.1	-10.5	0.0	-0.1
	Wind +X ecc.+	25.5	36.8	-0.2	14.1	-0.2	-0.0
	Wind +X ecc.-	24.2	37.6	-0.4	14.5	-0.4	-0.0
	Wind -X ecc.+	-25.5	-36.8	0.2	-14.1	0.2	0.0
	Wind -X ecc.-	-24.2	-37.6	0.4	-14.5	0.4	0.0
	Wind +Y ecc.+	29.3	0.5	4.2	-0.8	3.1	0.4
	Wind +Y ecc.-	35.0	-3.1	5.5	-2.6	4.0	0.3
	Wind -Y ecc.+	-29.3	-0.5	-4.2	0.8	-3.1	-0.4
	Wind -Y ecc.-	-35.0	3.1	-5.5	2.6	-4.0	-0.3
	Earthquake X Mode 1	72.6	108.6	-2.7	40.1	-2.1	0.6
	Earthquake X Mode 2	-268.3	-359.6	5.3	-130.1	4.5	1.3
	Earthquake X Mode 3	41.8	8.8	4.4	2.0	3.2	0.2
	Earthquake X Mode 4	-1.7	13.4	-0.6	6.5	-0.5	0.1
	Earthquake X Mode 5	5.9	-51.2	0.2	-24.0	0.2	0.1
	Earthquake X Mode 6	-0.1	0.7	0.4	0.3	0.3	0.0
	Earthquake X Mode 7	0.2	3.3	-0.3	2.1	-0.2	0.0
	Earthquake X Mode 8	0.3	2.6	0.3	1.6	0.3	0.0
	Earthquake X Mode 9	1.2	15.5	-0.2	9.5	-0.2	-0.0
	Earthquake Y Mode 1	32.9	49.3	-1.2	18.2	-1.0	0.3
	Earthquake Y Mode 2	-82.9	-111.1	1.6	-40.2	1.4	0.4
	Earthquake Y Mode 3	257.3	54.3	26.8	12.2	19.5	1.3
	Earthquake Y Mode 4	-0.3	2.6	-0.1	1.2	-0.1	0.0
	Earthquake Y Mode 5	1.1	-9.3	0.0	-4.4	0.0	0.0
	Earthquake Y Mode 6	-0.6	6.1	3.5	2.1	2.6	0.2
	Earthquake Y Mode 7	0.1	1.0	-0.1	0.6	-0.1	0.0
	Earthquake Y Mode 8	0.9	6.6	0.9	3.9	0.6	0.0
	Earthquake Y Mode 9	0.4	5.7	-0.1	3.5	-0.1	-0.0
W43	Self weight	324.2	-1.3	4.3	-1.5	1.6	0.0
	Dead load	119.1	0.0	0.0	0.0	-1.1	-0.0
	Live load	102.3	-0.7	2.8	-0.8	1.1	-0.0
	Wind +X ecc.+	18.6	1.1	1.2	0.5	1.2	-0.0
	Wind +X ecc.-	16.8	1.0	-1.7	0.5	-0.4	0.0
	Wind -X ecc.+	-18.6	-1.1	-1.2	-0.5	-1.2	0.0
	Wind -X ecc.-	-16.8	-1.0	1.7	-0.5	0.4	-0.0
	Wind +Y ecc.+	16.7	-0.1	44.1	0.0	22.3	0.1
	Wind +Y ecc.-	25.4	0.3	57.6	0.2	29.7	-0.1
	Wind -Y ecc.+	-16.7	0.1	-44.1	-0.0	-22.3	-0.1
	Wind -Y ecc.-	-25.4	-0.3	-57.6	-0.2	-29.7	0.1
	Earthquake X Mode 1	32.1	1.4	-19.8	0.6	-9.9	0.5
	Earthquake X Mode 2	-216.1	-11.2	22.9	-5.6	3.8	0.7
	Earthquake X Mode 3	30.2	0.6	45.4	0.4	22.7	-0.1
	Earthquake X Mode 4	-1.6	0.1	-5.8	0.1	-3.4	0.1
	Earthquake X Mode 5	7.8	-1.6	-0.9	-0.9	-1.3	0.1
	Earthquake X Mode 6	0.2	0.0	4.9	0.0	2.8	-0.0
	Earthquake X Mode 7	-0.1	0.0	-3.0	0.0	-2.0	0.0
	Earthquake X Mode 8	0.4	0.1	4.5	0.1	3.1	-0.0
	Earthquake X Mode 9	0.7	0.5	-1.8	0.3	-1.1	-0.0
	Earthquake Y Mode 1	14.6	0.6	-9.0	0.3	-4.5	0.2
	Earthquake Y Mode 2	-66.7	-3.5	7.1	-1.7	1.2	0.2
	Earthquake Y Mode 3	186.0	3.6	279.3	2.2	139.7	-0.4
	Earthquake Y Mode 4	-0.3	0.0	-1.1	0.0	-0.7	0.0
	Earthquake Y Mode 5	1.4	-0.3	-0.2	-0.2	-0.2	0.0
	Earthquake Y Mode 6	1.6	0.4	40.0	0.2	23.3	-0.0
	Earthquake Y Mode 7	-0.0	0.0	-0.9	0.0	-0.6	0.0
	Earthquake Y Mode 8	1.0	0.2	11.2	0.1	7.6	-0.0
	Earthquake Y Mode 9	0.3	0.2	-0.6	0.1	-0.4	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W44	Self weight	303.7	-1.3	4.7	-1.4	1.3	-0.0
	Dead load	102.9	0.1	2.2	0.1	1.1	0.1
	Live load	83.1	-0.7	1.7	-0.8	-0.6	-0.0
	Wind +X ecc.+	12.4	1.1	-0.5	0.6	-0.6	0.0
	Wind +X ecc.-	12.4	1.2	-3.5	0.7	-2.2	0.1
	Wind -X ecc.+	-12.4	-1.1	0.5	-0.6	0.6	-0.0
	Wind -X ecc.-	-12.4	-1.2	3.5	-0.7	2.2	-0.1
	Wind +Y ecc.+	9.1	0.1	45.5	0.0	23.5	0.1
	Wind +Y ecc.-	9.1	-0.3	59.2	-0.2	31.1	-0.1
	Wind -Y ecc.+	-9.1	-0.1	-45.5	-0.0	-23.5	-0.1
	Wind -Y ecc.-	-9.1	0.3	-59.2	0.2	-31.1	0.1
	Earthquake X Mode 1	44.9	4.3	-24.7	2.4	-14.8	0.7
	Earthquake X Mode 2	-137.7	-10.6	42.8	-5.7	24.1	0.0
	Earthquake X Mode 3	12.3	0.1	46.2	0.0	23.3	-0.1
	Earthquake X Mode 4	-2.9	0.5	-6.3	0.3	-3.9	0.1
	Earthquake X Mode 5	7.1	-1.5	1.0	-0.9	0.8	0.0
	Earthquake X Mode 6	0.6	0.0	4.9	0.0	2.9	-0.0
	Earthquake X Mode 7	0.3	0.1	-3.1	0.1	-2.1	0.0
	Earthquake X Mode 8	-0.1	0.1	4.5	0.1	3.0	0.0
	Earthquake X Mode 9	0.7	0.5	-2.2	0.3	-1.5	-0.0
	Earthquake Y Mode 1	20.4	1.9	-11.2	1.1	-6.7	0.3
	Earthquake Y Mode 2	-42.5	-3.3	13.2	-1.8	7.4	0.0
	Earthquake Y Mode 3	75.6	0.8	284.4	0.1	143.2	-0.4
	Earthquake Y Mode 4	-0.6	0.1	-1.2	0.1	-0.8	0.0
	Earthquake Y Mode 5	1.3	-0.3	0.2	-0.2	0.2	0.0
	Earthquake Y Mode 6	5.0	0.1	40.7	0.0	23.9	-0.0
	Earthquake Y Mode 7	0.1	0.0	-0.9	0.0	-0.6	0.0
	Earthquake Y Mode 8	-0.2	0.2	11.2	0.1	7.6	0.0
	Earthquake Y Mode 9	0.3	0.2	-0.8	0.1	-0.6	-0.0
W45	Self weight	250.5	1.5	0.3	0.3	0.2	0.0
	Dead load	116.2	0.0	0.4	-0.2	0.4	0.0
	Live load	66.6	0.7	0.1	0.1	0.0	0.0
	Wind +X ecc.+	-11.8	21.9	-0.1	10.8	-0.1	-0.0
	Wind +X ecc.-	-12.0	21.0	-0.3	10.4	-0.2	0.0
	Wind -X ecc.+	11.8	-21.9	0.1	-10.8	0.1	0.0
	Wind -X ecc.-	12.0	-21.0	0.3	-10.4	0.2	-0.0
	Wind +Y ecc.+	3.3	-1.5	2.7	-0.6	1.8	0.1
	Wind +Y ecc.-	4.2	2.4	4.0	1.4	2.6	0.0
	Wind -Y ecc.+	-3.3	1.5	-2.7	0.6	-1.8	-0.1
	Wind -Y ecc.-	-4.2	-2.4	-4.0	-1.4	-2.6	-0.0
	Earthquake X Mode 1	-37.0	42.5	-3.2	20.1	-2.2	0.5
	Earthquake X Mode 2	141.2	-226.3	2.0	-107.3	1.6	0.4
	Earthquake X Mode 3	-0.6	8.7	3.1	4.3	2.1	0.0
	Earthquake X Mode 4	0.4	5.0	-0.6	2.8	-0.4	0.1
	Earthquake X Mode 5	-0.6	-32.6	-0.1	-18.2	-0.0	0.0
	Earthquake X Mode 6	0.1	0.6	0.3	0.3	0.2	0.0
	Earthquake X Mode 7	-0.1	1.1	-0.2	0.7	-0.2	0.0
	Earthquake X Mode 8	-0.1	1.6	0.3	1.1	0.2	0.0
	Earthquake X Mode 9	-0.6	9.8	-0.1	6.5	-0.1	-0.0
	Earthquake Y Mode 1	-16.8	19.3	-1.4	9.1	-1.0	0.2
	Earthquake Y Mode 2	43.6	-69.9	0.6	-33.2	0.5	0.1
	Earthquake Y Mode 3	-3.5	53.3	19.1	26.3	12.6	0.2
	Earthquake Y Mode 4	0.1	1.0	-0.1	0.5	-0.1	0.0
	Earthquake Y Mode 5	-0.1	-5.9	-0.0	-3.3	-0.0	0.0
	Earthquake Y Mode 6	0.8	5.1	2.5	2.9	1.7	0.0
	Earthquake Y Mode 7	-0.0	0.3	-0.1	0.2	-0.1	0.0
	Earthquake Y Mode 8	-0.1	4.0	0.6	2.7	0.5	0.0
	Earthquake Y Mode 9	-0.2	3.6	-0.0	2.4	-0.0	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W47	Self weight	284.7	-4.9	1.0	-5.3	-0.3	0.2
	Dead load	154.0	-0.7	3.2	-0.7	2.2	0.0
	Live load	78.5	-3.0	0.1	-3.2	-0.7	0.1
	Wind +X ecc.+	4.0	1.0	-0.0	0.5	0.1	-0.0
	Wind +X ecc.-	-0.5	1.0	4.7	0.5	2.1	0.0
	Wind -X ecc.+	-4.0	-1.0	0.0	-0.5	-0.1	0.0
	Wind -X ecc.-	0.5	-1.0	-4.7	-0.5	-2.1	-0.0
	Wind +Y ecc.+	-51.0	-0.0	55.4	-0.1	24.7	-0.1
	Wind +Y ecc.-	-30.4	-0.1	33.6	-0.1	15.2	-0.2
	Wind -Y ecc.+	51.0	0.0	-55.4	0.1	-24.7	0.1
	Wind -Y ecc.-	30.4	0.1	-33.6	0.1	-15.2	0.2
	Earthquake X Mode 1	-103.3	2.8	104.0	1.2	43.6	0.2
	Earthquake X Mode 2	-172.0	-9.7	108.2	-4.7	44.6	0.0
	Earthquake X Mode 3	-26.7	0.2	26.5	0.1	11.5	-0.1
	Earthquake X Mode 4	0.4	0.4	11.6	0.2	6.0	0.0
	Earthquake X Mode 5	7.5	-1.4	12.5	-0.7	6.4	0.0
	Earthquake X Mode 6	0.5	0.0	3.6	0.0	1.9	-0.0
	Earthquake X Mode 7	-0.1	0.1	2.4	0.1	1.5	0.0
	Earthquake X Mode 8	-0.3	0.1	4.0	0.0	2.5	-0.0
	Earthquake X Mode 9	1.4	0.4	-5.4	0.3	-3.4	-0.0
	Earthquake Y Mode 1	-46.9	1.3	47.2	0.5	19.8	0.1
	Earthquake Y Mode 2	-53.1	-3.0	33.4	-1.5	13.8	0.0
	Earthquake Y Mode 3	-164.4	1.4	163.2	0.5	70.6	-0.9
	Earthquake Y Mode 4	0.1	0.1	2.2	0.0	1.2	0.0
	Earthquake Y Mode 5	1.4	-0.3	2.3	-0.1	1.2	0.0
	Earthquake Y Mode 6	3.8	0.2	29.9	0.1	15.7	-0.1
	Earthquake Y Mode 7	-0.0	0.0	0.7	0.0	0.5	0.0
	Earthquake Y Mode 8	-0.8	0.2	9.9	0.1	6.4	-0.0
	Earthquake Y Mode 9	0.5	0.2	-2.0	0.1	-1.2	-0.0
W49	Self weight	311.4	-5.5	2.1	-6.0	0.7	-0.1
	Dead load	166.2	-0.7	-0.8	-0.8	-1.9	-0.0
	Live load	90.4	-3.4	1.7	-3.6	0.9	-0.1
	Wind +X ecc.+	4.0	1.0	-0.4	0.5	-0.3	-0.0
	Wind +X ecc.-	8.6	1.0	4.4	0.5	1.8	0.0
	Wind -X ecc.+	-4.0	-1.0	0.4	-0.5	0.3	0.0
	Wind -X ecc.-	-8.6	-1.0	-4.4	-0.5	-1.8	-0.0
	Wind +Y ecc.+	52.6	-0.1	56.9	-0.0	25.0	-0.1
	Wind +Y ecc.-	31.6	0.1	34.5	0.0	15.4	-0.2
	Wind -Y ecc.+	-52.6	0.1	-56.9	0.0	-25.0	0.1
	Wind -Y ecc.-	-31.6	-0.1	-34.5	-0.0	-15.4	0.2
	Earthquake X Mode 1	131.9	2.1	105.8	1.0	43.0	0.2
	Earthquake X Mode 2	72.1	-10.3	115.1	-4.9	49.0	-0.0
	Earthquake X Mode 3	31.1	0.4	27.1	0.2	11.4	-0.1
	Earthquake X Mode 4	-3.2	0.2	11.8	0.1	6.0	0.0
	Earthquake X Mode 5	4.0	-1.5	13.4	-0.8	7.0	0.0
	Earthquake X Mode 6	-0.7	0.0	3.7	0.0	1.9	-0.0
	Earthquake X Mode 7	0.4	0.1	2.4	0.0	1.5	0.0
	Earthquake X Mode 8	0.7	0.1	4.1	0.0	2.6	-0.0
	Earthquake X Mode 9	0.2	0.5	-5.7	0.3	-3.6	-0.0
	Earthquake Y Mode 1	59.8	0.9	48.0	0.5	19.5	0.1
	Earthquake Y Mode 2	22.3	-3.2	35.6	-1.5	15.1	-0.0
	Earthquake Y Mode 3	191.5	2.4	166.6	1.2	70.3	-0.9
	Earthquake Y Mode 4	-0.6	0.0	2.3	0.0	1.2	0.0
	Earthquake Y Mode 5	0.7	-0.3	2.4	-0.1	1.3	0.0
	Earthquake Y Mode 6	-5.9	0.2	30.6	0.1	15.9	-0.1
	Earthquake Y Mode 7	0.1	0.0	0.7	0.0	0.5	0.0
	Earthquake Y Mode 8	1.7	0.2	10.2	0.1	6.5	-0.0
	Earthquake Y Mode 9	0.1	0.2	-2.1	0.1	-1.3	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W50	Self weight	724.9	5.7	-3.6	1.8	-3.9	0.0
	Dead load	351.4	6.1	0.4	5.9	0.3	0.1
	Live load	285.6	3.4	-2.4	1.6	-2.7	-0.0
	Wind +X ecc.+	-1.5	42.0	0.0	14.3	0.0	-0.0
	Wind +X ecc.-	2.3	37.0	0.5	12.5	0.4	0.1
	Wind -X ecc.+	1.5	-42.0	-0.0	-14.3	-0.0	0.0
	Wind -X ecc.-	-2.3	-37.0	-0.5	-12.5	-0.4	-0.1
	Wind +Y ecc.+	41.3	-10.4	6.1	-3.0	4.3	0.2
	Wind +Y ecc.-	23.9	12.7	3.8	5.2	2.7	-0.0
	Wind -Y ecc.+	-41.3	10.4	-6.1	3.0	-4.3	-0.2
	Wind -Y ecc.-	-23.9	-12.7	-3.8	-5.2	-2.7	0.0
	Earthquake X Mode 1	94.8	24.0	11.4	6.8	8.0	1.1
	Earthquake X Mode 2	118.5	-470.2	11.7	-148.1	8.1	0.8
	Earthquake X Mode 3	22.2	22.7	3.1	7.9	2.2	-0.0
	Earthquake X Mode 4	-3.6	1.7	1.2	0.6	0.8	0.1
	Earthquake X Mode 5	-2.8	-66.8	1.3	-28.7	0.9	0.1
	Earthquake X Mode 6	-1.1	1.5	0.4	0.7	0.3	0.0
	Earthquake X Mode 7	0.2	-0.3	0.2	-0.2	0.2	0.0
	Earthquake X Mode 8	0.4	3.0	0.4	1.8	0.3	0.0
	Earthquake X Mode 9	-0.4	19.9	-0.5	11.6	-0.4	-0.0
	Earthquake Y Mode 1	43.0	10.9	5.2	3.1	3.6	0.5
	Earthquake Y Mode 2	36.6	-145.2	3.6	-45.8	2.5	0.3
	Earthquake Y Mode 3	136.9	140.0	18.8	48.4	13.3	-0.2
	Earthquake Y Mode 4	-0.7	0.3	0.2	0.1	0.2	0.0
	Earthquake Y Mode 5	-0.5	-12.2	0.2	-5.2	0.2	0.0
	Earthquake Y Mode 6	-8.7	12.3	3.1	5.6	2.3	0.0
	Earthquake Y Mode 7	0.1	-0.1	0.1	-0.1	0.0	0.0
	Earthquake Y Mode 8	1.0	7.6	1.0	4.5	0.7	0.0
	Earthquake Y Mode 9	-0.1	7.3	-0.2	4.3	-0.1	-0.0
W51	Self weight	1076.7	9.6	12.3	7.1	12.9	-0.2
	Dead load	304.4	8.0	0.4	8.8	0.3	0.0
	Live load	457.6	4.8	8.3	4.4	8.7	-0.1
	Wind +X ecc.+	-2.1	83.6	-0.1	24.6	-0.1	0.0
	Wind +X ecc.-	-6.6	92.9	0.5	27.5	0.3	0.1
	Wind -X ecc.+	2.1	-83.6	0.1	-24.6	0.1	-0.0
	Wind -X ecc.-	6.6	-92.9	-0.5	-27.5	-0.3	-0.1
	Wind +Y ecc.+	-48.1	20.5	7.6	4.8	5.1	-0.0
	Wind +Y ecc.-	-27.4	-22.9	4.7	-8.6	3.2	-0.3
	Wind -Y ecc.+	48.1	-20.5	-7.6	-4.8	-5.1	0.0
	Wind -Y ecc.-	27.4	22.9	-4.7	8.6	-3.2	0.3
	Earthquake X Mode 1	-123.4	381.8	13.8	104.3	9.1	0.9
	Earthquake X Mode 2	-95.2	-742.2	15.8	-199.7	10.8	0.2
	Earthquake X Mode 3	-26.9	8.2	3.7	0.7	2.5	-0.2
	Earthquake X Mode 4	4.1	46.1	1.4	18.5	1.0	0.1
	Earthquake X Mode 5	4.6	-99.3	1.7	-39.1	1.2	0.1
	Earthquake X Mode 6	1.2	1.1	0.5	0.4	0.3	-0.0
	Earthquake X Mode 7	-0.2	11.5	0.3	6.7	0.2	0.0
	Earthquake X Mode 8	-0.4	5.5	0.5	3.1	0.4	-0.0
	Earthquake X Mode 9	0.6	28.3	-0.7	16.2	-0.5	-0.0
	Earthquake Y Mode 1	-56.0	173.3	6.3	47.3	4.1	0.4
	Earthquake Y Mode 2	-29.4	-229.3	4.9	-61.7	3.3	0.1
	Earthquake Y Mode 3	-165.5	50.3	22.9	4.1	15.4	-1.3
	Earthquake Y Mode 4	0.8	8.9	0.3	3.6	0.2	0.0
	Earthquake Y Mode 5	0.8	-18.1	0.3	-7.1	0.2	0.0
	Earthquake Y Mode 6	10.0	9.4	3.9	2.9	2.7	-0.1
	Earthquake Y Mode 7	-0.1	3.5	0.1	2.0	0.1	0.0
	Earthquake Y Mode 8	-1.1	13.7	1.2	7.7	0.9	-0.0
	Earthquake Y Mode 9	0.2	10.3	-0.2	5.9	-0.2	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W54	Self weight	197.2	0.5	1.7	0.5	0.4	-0.0
	Dead load	114.0	0.3	3.2	0.3	2.2	0.0
	Live load	33.3	0.3	0.5	0.3	-0.3	-0.0
	Wind +X ecc.+	19.5	1.6	-0.7	1.2	-0.7	-0.1
	Wind +X ecc.-	15.1	1.7	3.5	1.2	1.1	-0.1
	Wind -X ecc.+	-19.5	-1.6	0.7	-1.2	0.7	0.1
	Wind -X ecc.-	-15.1	-1.7	-3.5	-1.2	-1.1	0.1
	Wind +Y ecc.+	-53.0	-0.0	54.1	-0.1	23.9	0.2
	Wind +Y ecc.-	-32.5	-0.2	34.6	-0.1	15.6	0.0
	Wind -Y ecc.+	53.0	0.0	-54.1	0.1	-23.9	-0.2
	Wind -Y ecc.-	32.5	0.2	-34.6	0.1	-15.6	-0.0
	Earthquake X Mode 1	-57.5	4.8	93.7	3.3	37.2	0.5
	Earthquake X Mode 2	-357.7	-16.1	109.9	-11.4	49.3	1.9
	Earthquake X Mode 3	-22.9	0.4	27.0	0.3	11.5	0.0
	Earthquake X Mode 4	0.4	0.5	10.3	0.4	5.2	0.1
	Earthquake X Mode 5	8.2	-2.2	12.5	-1.7	6.7	0.2
	Earthquake X Mode 6	0.4	0.0	3.6	0.0	1.9	0.0
	Earthquake X Mode 7	-0.2	0.1	2.0	0.1	1.3	0.0
	Earthquake X Mode 8	-0.4	0.1	3.9	0.1	2.5	0.0
	Earthquake X Mode 9	1.1	0.6	-5.3	0.5	-3.4	-0.0
	Earthquake Y Mode 1	-26.1	2.2	42.5	1.5	16.9	0.2
	Earthquake Y Mode 2	-110.5	-5.0	34.0	-3.5	15.2	0.6
	Earthquake Y Mode 3	-140.8	2.4	166.2	1.5	71.0	0.0
	Earthquake Y Mode 4	0.1	0.1	2.0	0.1	1.0	0.0
	Earthquake Y Mode 5	1.5	-0.4	2.3	-0.3	1.2	0.0
	Earthquake Y Mode 6	3.6	0.2	29.9	0.1	15.6	0.0
	Earthquake Y Mode 7	-0.1	0.0	0.6	0.0	0.4	0.0
	Earthquake Y Mode 8	-1.1	0.2	9.8	0.2	6.2	0.0
	Earthquake Y Mode 9	0.4	0.2	-1.9	0.2	-1.3	-0.0
W55	Self weight	215.5	0.6	2.1	0.6	0.8	-0.0
	Dead load	124.6	0.3	-0.8	0.3	-2.0	-0.0
	Live load	42.0	0.3	1.7	0.3	0.9	-0.0
	Wind +X ecc.+	21.3	1.7	-0.1	1.2	0.0	-0.1
	Wind +X ecc.-	24.6	1.6	4.3	1.1	1.9	-0.0
	Wind -X ecc.+	-21.3	-1.7	0.1	-1.2	-0.0	0.1
	Wind -X ecc.-	-24.6	-1.6	-4.3	-1.1	-1.9	0.0
	Wind +Y ecc.+	43.9	-0.3	55.4	-0.3	24.6	0.3
	Wind +Y ecc.-	28.5	0.0	35.4	0.0	16.0	0.0
	Wind -Y ecc.+	-43.9	0.3	-55.4	0.3	-24.6	-0.3
	Wind -Y ecc.-	-28.5	-0.0	-35.4	-0.0	-16.0	-0.0
	Earthquake X Mode 1	155.1	3.0	98.1	2.0	40.4	0.8
	Earthquake X Mode 2	-155.2	-17.7	105.6	-12.7	43.5	1.4
	Earthquake X Mode 3	34.5	0.5	27.8	0.4	12.0	0.0
	Earthquake X Mode 4	-2.8	0.4	10.8	0.3	5.5	0.1
	Earthquake X Mode 5	5.4	-2.4	12.2	-1.8	6.2	0.2
	Earthquake X Mode 6	-0.5	0.0	3.7	0.0	2.0	0.0
	Earthquake X Mode 7	0.3	0.1	2.1	0.1	1.3	0.0
	Earthquake X Mode 8	0.5	0.1	4.1	0.1	2.6	0.0
	Earthquake X Mode 9	-0.1	0.7	-5.3	0.5	-3.4	-0.0
	Earthquake Y Mode 1	70.4	1.4	44.5	0.9	18.3	0.4
	Earthquake Y Mode 2	-47.9	-5.5	32.6	-3.9	13.4	0.4
	Earthquake Y Mode 3	212.4	3.3	171.3	2.2	73.9	0.0
	Earthquake Y Mode 4	-0.5	0.1	2.1	0.1	1.1	0.0
	Earthquake Y Mode 5	1.0	-0.4	2.2	-0.3	1.1	0.0
	Earthquake Y Mode 6	-4.5	0.3	30.7	0.2	16.1	0.0
	Earthquake Y Mode 7	0.1	0.0	0.6	0.0	0.4	0.0
	Earthquake Y Mode 8	1.3	0.3	10.1	0.2	6.5	0.0
	Earthquake Y Mode 9	-0.0	0.2	-1.9	0.2	-1.2	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W56	Self weight	488.6	24.2	0.2	22.8	0.1	-0.0
	Dead load	149.8	1.3	0.3	0.6	0.2	-0.0
	Live load	155.4	12.5	-0.0	12.0	-0.1	0.0
	Wind +X ecc.+	-35.4	46.0	0.0	16.7	0.0	-0.0
	Wind +X ecc.-	-36.2	46.9	0.2	17.1	0.2	0.0
	Wind -X ecc.+	35.4	-46.0	-0.0	-16.7	-0.0	0.0
	Wind -X ecc.-	36.2	-46.9	-0.2	-17.1	-0.2	-0.0
	Wind +Y ecc.+	-7.9	2.5	5.0	1.2	3.4	-0.1
	Wind +Y ecc.-	-3.9	-1.7	4.1	-0.6	2.7	-0.3
	Wind -Y ecc.+	7.9	-2.5	-5.0	-1.2	-3.4	0.1
	Wind -Y ecc.-	3.9	1.7	-4.1	0.6	-2.7	0.3
	Earthquake X Mode 1	-130.1	135.9	6.2	47.1	4.1	0.5
	Earthquake X Mode 2	402.0	-448.1	7.9	-150.4	5.1	0.5
	Earthquake X Mode 3	-17.1	12.9	3.2	4.4	2.2	-0.3
	Earthquake X Mode 4	3.9	16.5	0.5	7.6	0.4	0.1
	Earthquake X Mode 5	-11.0	-63.5	0.8	-28.7	0.5	0.1
	Earthquake X Mode 6	0.6	1.1	0.4	0.5	0.3	-0.0
	Earthquake X Mode 7	-0.4	4.0	0.0	2.4	0.0	0.0
	Earthquake X Mode 8	-0.4	3.3	0.4	2.0	0.3	-0.0
	Earthquake X Mode 9	-1.6	18.9	-0.4	11.3	-0.3	-0.0
	Earthquake Y Mode 1	-59.0	61.7	2.8	21.4	1.9	0.2
	Earthquake Y Mode 2	124.2	-138.4	2.5	-46.5	1.6	0.1
	Earthquake Y Mode 3	-105.5	79.1	19.9	26.9	13.4	-1.6
	Earthquake Y Mode 4	0.7	3.2	0.1	1.5	0.1	0.0
	Earthquake Y Mode 5	-2.0	-11.5	0.1	-5.2	0.1	0.0
	Earthquake Y Mode 6	4.6	8.8	3.1	4.0	2.1	-0.2
	Earthquake Y Mode 7	-0.1	1.2	0.0	0.7	0.0	0.0
	Earthquake Y Mode 8	-1.1	8.3	0.9	5.0	0.6	-0.0
	Earthquake Y Mode 9	-0.6	6.9	-0.1	4.1	-0.1	-0.0
W57	Self weight	536.3	26.4	-0.3	24.5	-0.4	0.0
	Dead load	202.2	2.4	-0.7	2.0	-0.9	0.1
	Live load	180.4	14.1	-0.1	13.2	-0.2	-0.0
	Wind +X ecc.+	-35.7	47.6	-0.1	17.1	-0.1	0.0
	Wind +X ecc.-	-34.0	45.8	0.2	16.4	0.1	0.1
	Wind -X ecc.+	35.7	-47.6	0.1	-17.1	0.1	-0.0
	Wind -X ecc.-	34.0	-45.8	-0.2	-16.4	-0.1	-0.1
	Wind +Y ecc.+	10.7	-4.2	5.0	-1.6	3.4	-0.1
	Wind +Y ecc.-	2.9	4.5	4.1	1.7	2.7	-0.3
	Wind -Y ecc.+	-10.7	4.2	-5.0	1.6	-3.4	0.1
	Wind -Y ecc.-	-2.9	-4.5	-4.1	-1.7	-2.7	0.3
	Earthquake X Mode 1	-69.8	91.9	6.0	29.9	3.8	0.7
	Earthquake X Mode 2	460.2	-495.0	8.9	-166.2	6.1	-0.0
	Earthquake X Mode 3	-10.5	18.1	3.2	6.1	2.1	-0.2
	Earthquake X Mode 4	1.4	10.7	0.5	4.8	0.4	0.1
	Earthquake X Mode 5	-13.6	-70.1	0.8	-31.6	0.6	0.0
	Earthquake X Mode 6	-0.2	1.3	0.4	0.6	0.3	-0.0
	Earthquake X Mode 7	-0.2	2.3	0.0	1.4	0.0	0.0
	Earthquake X Mode 8	-0.2	3.4	0.4	2.0	0.3	-0.0
	Earthquake X Mode 9	-2.0	20.8	-0.4	12.5	-0.3	-0.0
	Earthquake Y Mode 1	-31.7	41.7	2.7	13.5	1.7	0.3
	Earthquake Y Mode 2	142.1	-152.9	2.7	-51.3	1.9	-0.0
	Earthquake Y Mode 3	-64.7	111.5	19.8	37.6	13.2	-1.4
	Earthquake Y Mode 4	0.3	2.1	0.1	0.9	0.1	0.0
	Earthquake Y Mode 5	-2.5	-12.8	0.2	-5.8	0.1	0.0
	Earthquake Y Mode 6	-1.5	11.0	3.1	5.0	2.1	-0.1
	Earthquake Y Mode 7	-0.1	0.7	0.0	0.4	0.0	0.0
	Earthquake Y Mode 8	-0.4	8.5	0.9	5.1	0.6	-0.0
	Earthquake Y Mode 9	-0.7	7.6	-0.1	4.6	-0.1	-0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W58	Self weight	273.6	3.0	0.0	1.9	-0.1	-0.1
	Dead load	138.0	0.7	0.2	0.5	0.1	-0.1
	Live load	76.4	1.5	-0.1	0.9	-0.1	-0.0
	Wind +X ecc.+	12.7	21.6	0.0	10.7	0.0	-0.0
	Wind +X ecc.-	14.3	20.7	0.3	10.2	0.2	0.0
	Wind -X ecc.+	-12.7	-21.6	-0.0	-10.7	-0.0	0.0
	Wind -X ecc.-	-14.3	-20.7	-0.3	-10.2	-0.2	-0.0
	Wind +Y ecc.+	23.5	-2.6	3.7	-1.7	2.4	-0.0
	Wind +Y ecc.-	16.1	1.6	2.6	0.7	1.7	-0.2
	Wind -Y ecc.+	-23.5	2.6	-3.7	1.7	-2.4	0.0
	Wind -Y ecc.-	-16.1	-1.6	-2.6	-0.7	-1.7	0.2
	Earthquake X Mode 1	84.2	40.1	5.8	18.1	3.8	0.4
	Earthquake X Mode 2	-96.0	-225.3	6.4	-108.2	3.9	0.2
	Earthquake X Mode 3	19.9	7.9	2.1	3.6	1.4	-0.1
	Earthquake X Mode 4	-1.9	4.9	0.6	2.7	0.4	0.1
	Earthquake X Mode 5	-1.1	-32.6	0.7	-18.4	0.4	0.0
	Earthquake X Mode 6	-0.6	0.6	0.3	0.3	0.2	-0.0
	Earthquake X Mode 7	0.2	1.1	0.1	0.7	0.1	0.0
	Earthquake X Mode 8	0.3	1.6	0.3	1.0	0.2	-0.0
	Earthquake X Mode 9	0.4	9.8	-0.3	6.5	-0.2	-0.0
	Earthquake Y Mode 1	38.2	18.2	2.6	8.2	1.7	0.2
	Earthquake Y Mode 2	-29.7	-69.6	2.0	-33.4	1.2	0.1
	Earthquake Y Mode 3	122.4	48.3	12.9	22.0	8.5	-0.8
	Earthquake Y Mode 4	-0.4	0.9	0.1	0.5	0.1	0.0
	Earthquake Y Mode 5	-0.2	-5.9	0.1	-3.4	0.1	0.0
	Earthquake Y Mode 6	-4.6	4.9	2.1	2.7	1.5	-0.1
	Earthquake Y Mode 7	0.1	0.3	0.0	0.2	0.0	0.0
	Earthquake Y Mode 8	0.8	3.9	0.6	2.6	0.5	-0.0
	Earthquake Y Mode 9	0.1	3.6	-0.1	2.4	-0.1	-0.0
W59	Self weight	251.1	2.4	0.0	1.4	-0.0	0.0
	Dead load	125.0	0.4	-0.1	0.3	-0.2	0.0
	Live load	65.1	1.0	0.1	0.6	0.0	0.0
	Wind +X ecc.+	12.6	21.6	-0.1	10.7	-0.1	0.0
	Wind +X ecc.-	11.4	22.0	0.2	10.9	0.1	0.0
	Wind -X ecc.+	-12.6	-21.6	0.1	-10.7	0.1	-0.0
	Wind -X ecc.-	-11.4	-22.0	-0.2	-10.9	-0.1	-0.0
	Wind +Y ecc.+	-16.0	0.7	3.7	0.2	2.5	-0.0
	Wind +Y ecc.-	-10.6	-1.1	2.6	-0.7	1.8	-0.2
	Wind -Y ecc.+	16.0	-0.7	-3.7	-0.2	-2.5	0.0
	Wind -Y ecc.-	10.6	1.1	-2.6	0.7	-1.8	0.2
	Earthquake X Mode 1	4.6	63.1	5.6	30.0	3.5	0.4
	Earthquake X Mode 2	-184.6	-210.7	7.4	-100.0	5.0	0.1
	Earthquake X Mode 3	-5.5	5.8	2.1	2.6	1.4	-0.1
	Earthquake X Mode 4	1.3	7.8	0.6	4.3	0.4	0.1
	Earthquake X Mode 5	2.2	-30.6	0.8	-17.3	0.6	0.0
	Earthquake X Mode 6	0.5	0.5	0.3	0.2	0.2	-0.0
	Earthquake X Mode 7	0.0	1.9	0.1	1.3	0.1	0.0
	Earthquake X Mode 8	-0.1	1.6	0.3	1.0	0.2	-0.0
	Earthquake X Mode 9	0.8	9.2	-0.3	6.1	-0.2	-0.0
	Earthquake Y Mode 1	2.1	28.6	2.6	13.6	1.6	0.2
	Earthquake Y Mode 2	-57.0	-65.1	2.3	-30.9	1.5	0.0
	Earthquake Y Mode 3	-33.6	35.6	12.8	16.1	8.4	-0.7
	Earthquake Y Mode 4	0.2	1.5	0.1	0.8	0.1	0.0
	Earthquake Y Mode 5	0.4	-5.6	0.1	-3.1	0.1	0.0
	Earthquake Y Mode 6	3.8	3.8	2.2	1.9	1.5	-0.1
	Earthquake Y Mode 7	0.0	0.6	0.0	0.4	0.0	0.0
	Earthquake Y Mode 8	-0.2	3.9	0.6	2.6	0.5	-0.0
	Earthquake Y Mode 9	0.3	3.4	-0.1	2.2	-0.1	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W11	Self weight	351.8	3.6	-3.3	2.0	-3.5	0.9
	Dead load	122.1	3.7	-0.9	3.7	-1.1	0.2
	Live load	111.1	2.0	-2.3	1.2	-2.4	0.5
	Wind +X ecc.+	-18.6	19.9	0.0	8.7	0.0	0.1
	Wind +X ecc.-	-15.3	17.6	0.7	7.7	0.4	0.1
	Wind -X ecc.+	18.6	-19.9	-0.0	-8.7	-0.0	-0.1
	Wind -X ecc.-	15.3	-17.6	-0.7	-7.7	-0.4	-0.1
	Wind +Y ecc.+	14.4	-4.4	4.3	-1.5	2.6	0.3
	Wind +Y ecc.-	-0.6	6.3	1.3	3.2	0.8	-0.0
	Wind -Y ecc.+	-14.4	4.4	-4.3	1.5	-2.6	-0.3
	Wind -Y ecc.-	0.6	-6.3	-1.3	-3.2	-0.8	0.0
	Earthquake X Mode 1	14.6	12.6	12.7	5.6	7.6	1.2
	Earthquake X Mode 2	267.8	-219.6	10.5	-89.7	6.1	0.3
	Earthquake X Mode 3	-7.4	10.9	1.0	4.9	0.6	0.0
	Earthquake X Mode 4	-0.9	0.9	1.5	0.5	1.0	0.1
	Earthquake X Mode 5	1.1	-32.9	1.3	-17.0	0.8	0.0
	Earthquake X Mode 6	-0.2	0.8	0.2	0.4	0.1	0.0
	Earthquake X Mode 7	0.1	-0.1	0.4	-0.1	0.3	0.0
	Earthquake X Mode 8	0.1	1.5	0.2	1.0	0.2	0.0
	Earthquake X Mode 9	-0.3	10.0	-0.5	6.3	-0.3	-0.0
	Earthquake Y Mode 1	6.6	5.7	5.8	2.5	3.5	0.6
	Earthquake Y Mode 2	82.7	-67.8	3.2	-27.7	1.9	0.1
	Earthquake Y Mode 3	-45.6	67.3	6.4	30.0	3.8	0.1
	Earthquake Y Mode 4	-0.2	0.2	0.3	0.1	0.2	0.0
	Earthquake Y Mode 5	0.2	-6.0	0.2	-3.1	0.2	0.0
	Earthquake Y Mode 6	-1.2	6.2	1.6	3.4	1.0	0.0
	Earthquake Y Mode 7	0.0	-0.0	0.1	-0.0	0.1	0.0
	Earthquake Y Mode 8	0.2	3.9	0.6	2.5	0.4	0.0
	Earthquake Y Mode 9	-0.1	3.6	-0.2	2.3	-0.1	-0.0
W12	Self weight	505.5	2.2	-9.2	2.3	-9.3	0.0
	Dead load	225.1	-0.3	1.5	-0.3	0.8	0.1
	Live load	190.7	1.2	-6.4	1.3	-6.5	0.0
	Wind +X ecc.+	-5.9	1.6	-0.5	1.1	-0.2	-0.1
	Wind +X ecc.-	-4.3	1.4	7.2	1.0	2.5	-0.1
	Wind -X ecc.+	5.9	-1.6	0.5	-1.1	0.2	0.1
	Wind -X ecc.-	4.3	-1.4	-7.2	-1.0	-2.5	0.1
	Wind +Y ecc.+	10.3	-0.4	56.9	-0.2	20.0	0.2
	Wind +Y ecc.-	2.6	0.5	21.6	0.3	7.4	-0.1
	Wind -Y ecc.+	-10.3	0.4	-56.9	0.2	-20.0	-0.2
	Wind -Y ecc.-	-2.6	-0.5	-21.6	-0.3	-7.4	0.1
	Earthquake X Mode 1	20.2	1.2	150.1	0.8	49.1	0.8
	Earthquake X Mode 2	105.2	-18.0	136.7	-12.4	45.4	2.0
	Earthquake X Mode 3	0.0	0.9	17.0	0.6	5.4	-0.1
	Earthquake X Mode 4	-0.6	0.1	18.2	0.1	7.9	0.1
	Earthquake X Mode 5	-5.9	-2.4	17.2	-1.7	7.4	0.2
	Earthquake X Mode 6	-0.1	0.1	2.9	0.0	1.2	-0.0
	Earthquake X Mode 7	0.1	-0.0	4.6	-0.0	2.7	0.0
	Earthquake X Mode 8	-0.0	0.1	3.6	0.1	2.1	-0.0
	Earthquake X Mode 9	-0.8	0.7	-6.7	0.5	-3.9	-0.0
	Earthquake Y Mode 1	9.2	0.5	68.1	0.4	22.3	0.4
	Earthquake Y Mode 2	32.5	-5.6	42.2	-3.8	14.0	0.6
	Earthquake Y Mode 3	0.2	5.3	104.6	3.8	33.3	-0.6
	Earthquake Y Mode 4	-0.1	0.0	3.5	0.0	1.5	0.0
	Earthquake Y Mode 5	-1.1	-0.4	3.1	-0.3	1.4	0.0
	Earthquake Y Mode 6	-0.5	0.5	23.8	0.3	10.3	-0.0
	Earthquake Y Mode 7	0.0	-0.0	1.4	-0.0	0.8	0.0
	Earthquake Y Mode 8	-0.0	0.3	9.0	0.2	5.2	-0.0
	Earthquake Y Mode 9	-0.3	0.2	-2.5	0.2	-1.4	-0.0



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		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W13	Self weight	431.7	15.7	1.6	13.9	1.6	-0.5
	Dead load	162.7	2.1	-0.3	1.9	-0.4	0.1
	Live load	146.4	9.5	1.0	8.7	1.0	-0.3
	Wind +X ecc.+	-23.9	23.2	-0.1	9.3	-0.1	-0.1
	Wind +X ecc.-	-20.1	22.4	0.6	8.8	0.3	-0.1
	Wind -X ecc.+	23.9	-23.2	0.1	-9.3	0.1	0.1
	Wind -X ecc.-	20.1	-22.4	-0.6	-8.8	-0.3	0.1
	Wind +Y ecc.+	24.9	-3.2	5.2	-2.9	3.5	-0.5
	Wind +Y ecc.-	8.0	0.6	2.0	-0.2	1.3	-0.3
	Wind -Y ecc.+	-24.9	3.2	-5.2	2.9	-3.5	0.5
	Wind -Y ecc.-	-8.0	-0.6	-2.0	0.2	-1.3	0.3
	Earthquake X Mode 1	13.5	45.3	13.7	12.4	9.0	-1.0
	Earthquake X Mode 2	355.6	-240.8	13.5	-95.0	9.4	-0.3
	Earthquake X Mode 3	-1.8	7.6	1.5	2.4	1.0	-0.3
	Earthquake X Mode 4	-0.7	5.4	1.6	2.1	1.1	-0.1
	Earthquake X Mode 5	-9.4	-34.9	1.6	-17.2	1.2	0.0
	Earthquake X Mode 6	-0.2	0.5	0.2	0.2	0.2	-0.0
	Earthquake X Mode 7	0.1	1.3	0.4	0.7	0.3	0.0
	Earthquake X Mode 8	0.0	1.7	0.3	1.0	0.2	-0.0
	Earthquake X Mode 9	-2.5	10.7	-0.6	6.6	-0.4	-0.0
	Earthquake Y Mode 1	6.1	20.6	6.2	5.6	4.1	-0.5
	Earthquake Y Mode 2	109.8	-74.4	4.2	-29.4	2.9	-0.1
	Earthquake Y Mode 3	-11.2	46.6	9.5	15.0	6.3	-1.6
	Earthquake Y Mode 4	-0.1	1.0	0.3	0.4	0.2	-0.0
	Earthquake Y Mode 5	-1.7	-6.3	0.3	-3.1	0.2	0.0
	Earthquake Y Mode 6	-1.7	4.3	2.0	1.5	1.4	-0.2
	Earthquake Y Mode 7	0.0	0.4	0.1	0.2	0.1	0.0
	Earthquake Y Mode 8	0.1	4.1	0.7	2.4	0.5	-0.0
	Earthquake Y Mode 9	-0.9	3.9	-0.2	2.4	-0.2	-0.0
W14	Self weight	349.9	-5.7	0.8	-7.2	0.8	0.2
	Dead load	114.3	-2.2	0.4	-2.4	0.4	0.1
	Live load	74.3	-2.3	0.3	-3.0	0.4	0.1
	Wind +X ecc.+	21.7	18.3	0.0	7.2	0.0	0.0
	Wind +X ecc.-	23.5	18.1	0.8	7.3	0.5	0.1
	Wind -X ecc.+	-21.7	-18.3	-0.0	-7.2	-0.0	-0.0
	Wind -X ecc.-	-23.5	-18.1	-0.8	-7.3	-0.5	-0.1
	Wind +Y ecc.+	15.9	1.1	4.8	1.8	3.1	0.4
	Wind +Y ecc.-	7.2	1.8	1.4	1.2	0.9	0.0
	Wind -Y ecc.+	-15.9	-1.1	-4.8	-1.8	-3.1	-0.4
	Wind -Y ecc.-	-7.2	-1.8	-1.4	-1.2	-0.9	-0.0
	Earthquake X Mode 1	113.5	45.8	14.5	20.8	9.4	1.5
	Earthquake X Mode 2	-216.3	-180.1	11.8	-63.2	7.4	1.1
	Earthquake X Mode 3	14.7	7.0	1.1	3.0	0.7	0.0
	Earthquake X Mode 4	-4.6	5.5	1.7	3.0	1.1	0.2
	Earthquake X Mode 5	9.8	-26.4	1.5	-12.0	1.0	0.1
	Earthquake X Mode 6	-0.5	0.6	0.2	0.3	0.1	0.0
	Earthquake X Mode 7	0.8	1.3	0.4	0.8	0.3	0.0
	Earthquake X Mode 8	0.7	1.5	0.3	0.9	0.2	0.0
	Earthquake X Mode 9	1.5	8.3	-0.5	4.8	-0.4	-0.0
	Earthquake Y Mode 1	51.5	20.8	6.6	9.4	4.3	0.7
	Earthquake Y Mode 2	-66.8	-55.6	3.6	-19.5	2.3	0.3
	Earthquake Y Mode 3	90.4	42.8	7.0	18.4	4.5	0.1
	Earthquake Y Mode 4	-0.9	1.1	0.3	0.6	0.2	0.0
	Earthquake Y Mode 5	1.8	-4.8	0.3	-2.2	0.2	0.0
	Earthquake Y Mode 6	-4.4	4.8	1.7	2.7	1.2	0.1
	Earthquake Y Mode 7	0.2	0.4	0.1	0.2	0.1	0.0
	Earthquake Y Mode 8	1.8	3.7	0.6	2.3	0.4	0.0
	Earthquake Y Mode 9	0.6	3.0	-0.2	1.8	-0.1	-0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W15	Self weight	289.7	0.6	3.4	0.5	3.6	0.1
	Dead load	128.7	0.1	4.3	0.1	3.6	-0.0
	Live load	64.3	0.4	1.4	0.4	1.3	0.0
	Wind +X ecc.+	5.0	1.9	-0.5	1.4	-0.2	-0.2
	Wind +X ecc.-	4.2	1.9	8.0	1.4	2.9	-0.1
	Wind -X ecc.+	-5.0	-1.9	0.5	-1.4	0.2	0.2
	Wind -X ecc.-	-4.2	-1.9	-8.0	-1.4	-2.9	0.1
	Wind +Y ecc.+	-4.9	0.1	58.6	0.1	21.7	0.2
	Wind +Y ecc.-	-1.1	0.1	19.5	0.1	7.0	-0.0
	Wind -Y ecc.+	4.9	-0.1	-58.6	-0.1	-21.7	-0.2
	Wind -Y ecc.-	1.1	-0.1	-19.5	-0.1	-7.0	0.0
	Earthquake X Mode 1	-1.2	4.7	163.9	3.6	57.3	0.6
	Earthquake X Mode 2	-70.4	-18.7	144.9	-13.8	50.7	2.4
	Earthquake X Mode 3	0.7	0.7	15.5	0.5	5.1	-0.1
	Earthquake X Mode 4	-2.5	0.5	20.0	0.4	9.1	0.1
	Earthquake X Mode 5	-5.7	-2.7	18.6	-2.1	8.5	0.3
	Earthquake X Mode 6	-0.4	0.1	2.8	0.0	1.3	-0.0
	Earthquake X Mode 7	0.5	0.1	5.2	0.1	3.1	0.0
	Earthquake X Mode 8	0.4	0.1	3.6	0.1	2.1	-0.0
	Earthquake X Mode 9	-0.9	0.7	-7.1	0.5	-4.2	-0.0
	Earthquake Y Mode 1	-0.5	2.1	74.4	1.6	26.0	0.3
	Earthquake Y Mode 2	-21.7	-5.8	44.7	-4.3	15.7	0.7
	Earthquake Y Mode 3	4.2	4.2	95.2	3.2	31.7	-0.4
	Earthquake Y Mode 4	-0.5	0.1	3.9	0.1	1.8	0.0
	Earthquake Y Mode 5	-1.0	-0.5	3.4	-0.4	1.5	0.1
	Earthquake Y Mode 6	-3.2	0.4	23.2	0.3	10.4	-0.0
	Earthquake Y Mode 7	0.1	0.0	1.6	0.0	0.9	0.0
	Earthquake Y Mode 8	0.9	0.3	9.0	0.2	5.3	-0.0
	Earthquake Y Mode 9	-0.3	0.3	-2.6	0.2	-1.5	-0.0
W16	Self weight	328.7	0.1	4.8	0.1	3.9	-0.1
	Dead load	131.9	0.1	-0.9	0.1	-2.5	-0.0
	Live load	75.7	0.1	3.4	0.1	3.1	-0.1
	Wind +X ecc.+	-11.4	1.8	-0.6	1.3	-0.4	0.1
	Wind +X ecc.-	-9.7	2.0	10.5	1.4	3.6	0.2
	Wind -X ecc.+	11.4	-1.8	0.6	-1.3	0.4	-0.1
	Wind -X ecc.-	9.7	-2.0	-10.5	-1.4	-3.6	-0.2
	Wind +Y ecc.+	16.8	0.6	77.3	0.5	27.2	0.1
	Wind +Y ecc.-	9.1	-0.3	25.8	-0.2	8.7	-0.1
	Wind -Y ecc.+	-16.8	-0.6	-77.3	-0.5	-27.2	-0.1
	Wind -Y ecc.-	-9.1	0.3	-25.8	0.2	-8.7	0.1
	Earthquake X Mode 1	8.7	8.1	216.5	6.0	71.2	1.3
	Earthquake X Mode 2	175.0	-15.8	191.0	-11.0	64.5	-0.7
	Earthquake X Mode 3	4.7	0.3	20.4	0.3	6.4	-0.0
	Earthquake X Mode 4	-0.5	0.9	26.4	0.7	11.5	0.1
	Earthquake X Mode 5	-1.9	-2.2	24.6	-1.6	11.0	-0.1
	Earthquake X Mode 6	-0.2	0.0	3.7	0.0	1.6	-0.0
	Earthquake X Mode 7	-0.6	0.2	6.8	0.2	3.9	0.0
	Earthquake X Mode 8	-0.4	0.1	4.7	0.1	2.7	0.0
	Earthquake X Mode 9	-0.2	0.6	-9.3	0.4	-5.5	0.0
	Earthquake Y Mode 1	3.9	3.7	98.2	2.7	32.3	0.6
	Earthquake Y Mode 2	54.0	-4.9	59.0	-3.4	19.9	-0.2
	Earthquake Y Mode 3	28.9	2.1	125.6	1.7	39.1	-0.3
	Earthquake Y Mode 4	-0.1	0.2	5.1	0.1	2.2	0.0
	Earthquake Y Mode 5	-0.4	-0.4	4.5	-0.3	2.0	-0.0
	Earthquake Y Mode 6	-1.2	0.3	30.5	0.2	13.2	-0.0
	Earthquake Y Mode 7	-0.2	0.1	2.0	0.0	1.2	0.0
	Earthquake Y Mode 8	-1.1	0.3	11.7	0.2	6.8	0.0
	Earthquake Y Mode 9	-0.1	0.2	-3.4	0.2	-2.0	0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W17	Self weight	326.6	-1.7	0.9	-2.6	1.0	-0.6
	Dead load	112.9	-1.6	0.2	-1.7	0.2	-0.1
	Live load	68.8	-0.2	0.9	-0.5	0.9	-0.3
	Wind +X ecc.+	6.3	19.9	-0.2	8.9	-0.2	-0.1
	Wind +X ecc.-	6.1	21.3	0.4	9.3	0.2	-0.0
	Wind -X ecc.+	-6.3	-19.9	0.2	-8.9	0.2	0.1
	Wind -X ecc.-	-6.1	-21.3	-0.4	-9.3	-0.2	0.0
	Wind +Y ecc.+	-5.0	0.9	4.0	-1.4	2.3	0.3
	Wind +Y ecc.-	-3.6	-5.5	1.2	-3.2	0.7	0.0
	Wind -Y ecc.+	5.0	-0.9	-4.0	1.4	-2.3	-0.3
	Wind -Y ecc.-	3.6	5.5	-1.2	3.2	-0.7	-0.0
	Earthquake X Mode 1	9.5	73.9	11.4	26.6	6.2	1.0
	Earthquake X Mode 2	-88.4	-185.9	11.4	-83.3	7.1	1.8
	Earthquake X Mode 3	-0.8	1.8	0.9	0.1	0.5	-0.0
	Earthquake X Mode 4	-0.0	9.6	1.4	4.5	0.8	0.1
	Earthquake X Mode 5	6.6	-26.7	1.4	-14.5	1.0	0.2
	Earthquake X Mode 6	0.2	0.2	0.2	0.0	0.1	0.0
	Earthquake X Mode 7	-0.0	2.7	0.3	1.6	0.2	0.0
	Earthquake X Mode 8	-0.1	1.4	0.2	0.8	0.1	0.0
	Earthquake X Mode 9	1.7	8.1	-0.5	5.3	-0.4	-0.0
	Earthquake Y Mode 1	4.3	33.5	5.2	12.1	2.8	0.5
	Earthquake Y Mode 2	-27.3	-57.4	3.5	-25.7	2.2	0.5
	Earthquake Y Mode 3	-5.1	11.3	5.6	0.7	3.0	-0.0
	Earthquake Y Mode 4	-0.0	1.8	0.3	0.9	0.2	0.0
	Earthquake Y Mode 5	1.2	-4.9	0.3	-2.6	0.2	0.0
	Earthquake Y Mode 6	1.3	1.5	1.5	0.0	0.9	0.1
	Earthquake Y Mode 7	-0.0	0.8	0.1	0.5	0.1	0.0
	Earthquake Y Mode 8	-0.2	3.4	0.5	2.0	0.4	0.0
	Earthquake Y Mode 9	0.6	3.0	-0.2	1.9	-0.1	-0.0
W19	Self weight	639.1	1.7	-2.3	1.7	-4.6	-0.6
	Dead load	147.6	-0.2	4.0	-0.2	-0.0	-0.0
	Live load	221.7	0.9	-1.7	1.0	-3.0	-0.4
	Wind +X ecc.+	-9.9	2.3	-0.7	1.6	0.1	0.1
	Wind +X ecc.-	2.3	2.7	27.2	1.9	10.0	0.1
	Wind -X ecc.+	9.9	-2.3	0.7	-1.6	-0.1	-0.1
	Wind -X ecc.-	-2.3	-2.7	-27.2	-1.9	-10.0	-0.1
	Wind +Y ecc.+	96.3	1.4	208.1	1.3	73.3	0.2
	Wind +Y ecc.-	40.0	-0.2	78.8	-0.0	27.2	-0.1
	Wind -Y ecc.+	-96.3	-1.4	-208.1	-1.3	-73.3	-0.2
	Wind -Y ecc.-	-40.0	0.2	-78.8	0.0	-27.2	0.1
	Earthquake X Mode 1	252.1	12.8	557.2	9.7	184.5	1.5
	Earthquake X Mode 2	375.9	-19.0	494.5	-11.8	157.9	0.3
	Earthquake X Mode 3	32.9	0.6	63.1	0.5	20.3	-0.1
	Earthquake X Mode 4	4.9	1.4	65.4	1.1	29.9	0.2
	Earthquake X Mode 5	-4.0	-2.6	61.2	-1.7	27.5	0.1
	Earthquake X Mode 6	0.5	0.1	10.4	0.1	4.7	-0.0
	Earthquake X Mode 7	0.2	0.3	15.2	0.3	9.2	0.0
	Earthquake X Mode 8	0.2	0.2	11.8	0.1	7.2	0.0
	Earthquake X Mode 9	-1.6	0.7	-22.0	0.5	-13.2	-0.0
	Earthquake Y Mode 1	114.4	5.8	252.9	4.4	83.7	0.7
	Earthquake Y Mode 2	116.1	-5.9	152.8	-3.6	48.8	0.1
	Earthquake Y Mode 3	202.4	3.6	388.2	3.1	125.0	-0.6
	Earthquake Y Mode 4	0.9	0.3	12.6	0.2	5.8	0.0
	Earthquake Y Mode 5	-0.7	-0.5	11.1	-0.3	5.0	0.0
	Earthquake Y Mode 6	4.0	0.6	85.4	0.5	38.8	-0.0
	Earthquake Y Mode 7	0.1	0.1	4.6	0.1	2.8	0.0
	Earthquake Y Mode 8	0.6	0.5	29.6	0.3	17.9	0.0
	Earthquake Y Mode 9	-0.6	0.3	-8.0	0.2	-4.8	-0.0



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Support	Loadcase	Forces at starts					
		N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
W20	Self weight	686.1	-1.6	29.3	-1.7	28.9	-0.3
	Dead load	101.4	-0.6	5.3	-0.6	4.2	-0.1
	Live load	321.9	-1.3	19.3	-1.4	19.2	-0.2
	Wind +X ecc.+	-1.0	1.3	-0.3	0.7	-0.1	-0.0
	Wind +X ecc.-	-21.6	1.5	9.0	0.9	4.3	0.0
	Wind -X ecc.+	1.0	-1.3	0.3	-0.7	0.1	0.0
	Wind -X ecc.-	21.6	-1.5	-9.0	-0.9	-4.3	-0.0
	Wind +Y ecc.+	-156.2	0.6	69.8	0.4	32.6	0.0
	Wind +Y ecc.-	-61.4	-0.4	26.3	-0.2	12.1	-0.1
	Wind -Y ecc.+	156.2	-0.6	-69.8	-0.4	-32.6	-0.0
	Wind -Y ecc.-	61.4	0.4	-26.3	0.2	-12.1	0.1
	Earthquake X Mode 1	-487.0	7.2	184.9	4.5	83.0	0.5
	Earthquake X Mode 2	-417.8	-10.0	164.8	-5.6	73.1	0.4
	Earthquake X Mode 3	-56.8	0.1	20.8	0.0	9.2	-0.1
	Earthquake X Mode 4	6.8	0.9	22.9	0.6	12.5	0.1
	Earthquake X Mode 5	2.4	-1.4	21.6	-0.9	11.8	0.1
	Earthquake X Mode 6	0.9	0.0	3.6	0.0	2.0	-0.0
	Earthquake X Mode 7	-1.4	0.2	5.6	0.2	3.6	0.0
	Earthquake X Mode 8	-1.1	0.1	4.3	0.1	2.8	-0.0
	Earthquake X Mode 9	1.5	0.4	-8.0	0.3	-5.2	-0.0
	Earthquake Y Mode 1	-221.0	3.3	83.9	2.1	37.7	0.2
	Earthquake Y Mode 2	-129.0	-3.1	50.9	-1.7	22.6	0.1
	Earthquake Y Mode 3	-349.5	0.3	128.3	0.3	56.6	-0.4
	Earthquake Y Mode 4	1.3	0.2	4.4	0.1	2.4	0.0
	Earthquake Y Mode 5	0.4	-0.3	3.9	-0.2	2.1	0.0
	Earthquake Y Mode 6	7.7	0.2	29.9	0.1	16.3	-0.0
	Earthquake Y Mode 7	-0.4	0.1	1.7	0.1	1.1	0.0
	Earthquake Y Mode 8	-2.8	0.2	10.8	0.2	7.0	-0.0
	Earthquake Y Mode 9	0.6	0.2	-2.9	0.1	-1.9	-0.0

5.- WORST CASES OF COLUMNS, SHEAR WALLS AND WALLS

5.1.- Columns

Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN·m)	Myy (kN·m)	Qx (kN)	Qy (kN)			
C1	techo	12.00/15.00	50x50	Base	DL, LL, E	175.5	-107.9	-96.7	-69.0	77.7	Q	92.9	Verified
				Base	DL, LL	196.4	-122.1	-121.3	-84.5	83.8	N,M	74.4	Verified
	Floor 4	9.00/12.00	50x50	12.00 m	DL, LL, E	175.5	-107.9	-96.7	-69.0	77.7	N,M	62.3	Verified
				Head	DL, LL, E	410.0	113.6	81.5	-69.6	92.2	Q	76.4	Verified
				12.00 m	DL, LL	196.4	-122.1	-121.3	-84.5	83.8	N,M	74.4	Verified
				Head	DL, LL	486.0	121.5	113.4	-95.5	101.4	Q	70.6	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	663.0	121.0	85.2	-70.2	97.8	N,M	63.8	Verified
				Head	DL, LL	791.9	120.0	115.5	-94.8	98.9	N,M	73.3	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	934.9	-131.8	-93.2	-73.7	105.1	N,M	72.6	Verified
				Head	DL, LL, E	917.3	120.5	83.8	-73.7	105.1	N,M	66.7	Verified
				Base	DL, LL	1115.4	-133.1	-126.3	-100.8	106.1	N,M	83.8	Verified
				Head	DL, LL	1097.7	121.7	115.6	-100.8	106.1	N,M	77.4	Verified
	Floor 1	0.00/3.00	50x50	3.00 m	DL, LL, E	934.9	-131.8	-93.2	-73.7	105.1	N,M	72.6	Verified
				Head	DL, LL, E	1167.9	100.4	77.6	-49.7	84.3	N,M	63.2	Verified
				3.00 m	DL, LL	1115.4	-133.1	-126.3	-100.8	106.1	N,M	83.8	Verified
				Head	DL, LL	1400.4	113.2	106.6	-71.1	74.6	N,M	77.2	Verified
	Foundations	-0.15/0.00	50x50	Base	DL, LL, E	1185.6	-102.0	-41.7	-49.7	84.3	N,M	57.1	Verified
				Base	DL, LL	1418.0	-65.8	-64.1	-71.1	74.6	N,M	59.1	Verified
C2	techo	12.00/15.00	50x50	Base	DL, LL, E	346.5	-180.5	10.8	8.5	127.4	Q	67.9	Verified
				Base	DL, LL	397.1	-220.5	14.3	10.9	149.2	Q	90.6	Verified



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Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)			
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	757.8	165.6	-32.4	25.5	138.1	Q	68.7	Verified
				Head	DL, LL, E	765.6	181.6	-6.3	5.5	149.9	Q	98.9	Verified
				Base	DL, LL	960.6	-227.9	10.3	8.1	190.3	Q	94.9	Verified
				Head	DL, LL	942.9	228.8	-9.2	8.1	190.3	Q	97.4	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1204.8	189.0	-12.1	9.4	154.5	N,M	76.7	Verified
				Head	DL, LL	1505.8	222.8	-11.8	9.5	184.1	N,M	91.9	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1662.9	-207.2	13.5	11.0	165.8	N,M	82.0	Verified
				Head	DL, LL, E	1645.2	190.7	-12.9	11.0	165.8	N,M	78.1	Verified
				Base	DL, LL	2086.8	-247.7	13.8	10.7	198.3	N,M	99.8	Verified
				Head	DL, LL	2069.2	228.1	-11.8	10.7	198.3	N,M	95.4	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL, E	2083.4	164.4	-13.6	11.0	123.4	N,M	77.8	Verified
				Head	DL, LL	2631.2	208.2	-12.7	8.4	138.1	N,M	97.8	Verified
C3	Foundations	-0.22/0.00	50x50	Base	DL, LL, E	2101.1	-131.8	12.9	11.0	123.4	N,M	84.5	Verified
				Base	DL, LL	2648.9	-123.2	7.5	8.4	138.1	N,M	98.1	Verified
	techo	12.00/15.00	50x50	Base	DL, LL, E	331.7	-180.8	0.3	0.2	128.4	Q	68.5	Verified
				Base	DL, LL	379.6	-221.3	-3.7	-2.9	150.9	Q	91.6	Verified
	Floor 4	9.00/12.00	50x50	Base	DL, LL, E	758.2	-172.8	3.2	3.4	144.7	Q	86.1	Verified
				Head	DL, LL, E	740.5	174.5	-5.1	3.5	144.6	Q	94.0	Verified
				Base	DL, LL	929.8	-223.9	-2.2	-1.6	186.5	Q	94.7	Verified
				Head	DL, LL	912.1	223.7	1.7	-1.6	186.5	Q	96.4	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1166.4	181.5	-6.3	4.8	148.5	N,M	73.3	Verified
				Head	DL, LL, E	1166.5	181.5	-6.3	4.8	148.5	N,M	73.3	Verified
				Head	DL, LL	1460.8	220.0	2.2	-1.8	181.7	N,M	89.4	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1610.5	-196.7	7.1	6.0	157.5	N,M	79.9	Verified
				Head	DL, LL, E	1592.8	181.4	-7.4	6.0	157.5	N,M	76.3	Verified
				Base	DL, LL	2027.0	-242.4	-2.1	-1.6	194.3	N,M	99.0	Verified
				Head	DL, LL	2009.4	223.9	1.8	-1.6	194.3	N,M	94.8	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL, E	2013.7	155.8	-4.9	7.2	114.9	N,M	78.5	Verified
				Head	DL, LL	2552.6	202.6	1.7	-1.2	134.5	N,M	100.0	Verified
C4	Foundations	-0.21/0.00	50x50	Base	DL, LL, E	2031.4	-119.8	12.4	7.2	114.8	N,M	80.2	Verified
				Base	DL, LL	2570.2	-120.2	-1.2	-1.2	134.5	N,M	95.2	Verified
	techo	12.00/15.00	50x50	Base	DL, LL, E	333.6	-179.7	1.0	1.1	127.6	Q	68.0	Verified
				Base	DL, LL	384.0	-222.5	0.4	0.6	151.9	Q	92.2	Verified
	Floor 4	9.00/12.00	50x50	Base	DL, LL, E	760.3	-172.2	0.4	0.5	143.8	Q	83.9	Verified
				Head	DL, LL, E	742.6	173.0	-0.8	0.5	143.8	Q	91.0	Verified
				Base	DL, LL	936.4	-224.7	-1.0	-0.9	187.0	Q	94.6	Verified
				Head	DL, LL	918.7	224.2	1.2	-0.9	187.0	Q	96.2	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1169.3	180.3	-2.6	1.7	147.8	N,M	72.7	Verified
				Head	DL, LL, E	1169.4	180.3	-2.6	1.7	147.8	N,M	72.7	Verified
				Head	DL, LL	1469.7	220.9	0.3	-0.4	182.4	N,M	89.7	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1614.9	-197.6	2.3	2.2	157.5	N,M	79.9	Verified
				Head	DL, LL, E	1597.2	180.5	-3.1	2.2	157.5	N,M	75.9	Verified
				Base	DL, LL	2038.5	-244.5	-1.0	-0.7	195.6	N,M	99.6	Verified
				Head	DL, LL	2020.8	225.0	0.8	-0.7	195.6	N,M	95.2	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL, E	2020.9	156.1	-3.4	4.3	113.7	N,M	77.7	Verified
				Head	DL, LL	2568.3	204.8	0.7	-0.5	136.2	N,M	99.4	Verified
C5	Foundations	-0.21/0.00	50x50	Base	DL, LL, E	2038.7	-116.8	6.8	4.3	113.7	N,M	79.7	Verified
				Base	DL, LL	2585.9	-121.9	-0.6	-0.5	136.2	N,M	95.9	Verified
	techo	12.00/15.00	50x50	Base	DL, LL, E	322.3	-152.5	-6.1	-5.6	107.2	Q	94.8	Verified
				Base	DL, LL, E	322.3	-152.9	-1.1	-1.7	107.5	Q	95.1	Verified
				Base	DL, LL	364.7	-180.5	-0.5	-1.5	121.3	Q	73.3	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	713.4	157.6	4.9	-4.0	130.1	Q	68.7	Verified
				Head	DL, LL	866.9	191.5	-5.1	3.6	159.2	Q	94.7	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1124.3	162.2	9.0	-7.1	133.3	N,M	67.5	Verified
				Head	DL, LL	1387.4	185.9	-2.3	2.0	153.8	N,M	78.6	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1554.4	-179.4	-10.3	-7.8	142.5	N,M	80.8	Verified
				Head	DL, LL, E	1536.7	162.5	8.5	-7.8	142.5	N,M	76.1	Verified
				Base	DL, LL	1926.5	-208.0	1.5	1.6	166.4	N,M	96.0	Verified
				Head	DL, LL	1908.8	191.4	-2.4	1.6	166.4	N,M	91.7	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL, E	1945.3	135.8	5.2	-6.9	101.2	N,M	79.4	Verified
				Head	DL, LL	2428.9	174.0	-0.4	0.2	115.8	N,M	99.3	Verified
	Foundations	-0.19/0.00	50x50	Base	DL, LL, E	1963.2	-106.9	-11.3	-6.9	101.1	N,M	75.8	Verified
				Base	DL, LL	2446.6	-103.8	0.1	0.2	115.8	N,M	89.4	Verified



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)			
C6	techo	12.00/15.00	50x50	Base	DL, LL, E	159.1	-88.1	84.3	60.5	66.5	Q	79.9	Verified
				Base	DL, LL	176.3	-99.9	102.4	71.5	70.9	N,M	61.5	Verified
				Head	DL, LL	158.6	70.2	-69.2	71.5	70.9	Q	96.1	Verified
	Floor 4	9.00/12.00	50x50	12.00 m	DL, LL, E	159.1	-88.1	84.3	60.5	66.5	N,M	52.2	Verified
				Head	DL, LL, E	359.9	59.8	-85.3	70.0	52.4	Q	50.5	Verified
				12.00 m	DL, LL	176.3	-99.9	102.4	71.5	70.9	N,M	61.5	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL	432.1	88.6	-95.4	80.3	75.2	Q	57.4	Verified
				Head	DL, LL, E	591.1	88.8	-79.0	64.5	71.9	N,M	52.6	Verified
	Floor 2	3.00/6.00	50x50	Head	DL, LL	704.9	93.4	-98.1	80.5	76.7	N,M	60.6	Verified
				Base	DL, LL, E	834.4	-98.4	85.3	67.8	75.9	N,M	59.7	Verified
				Head	DL, LL, E	816.7	83.8	-77.4	67.8	75.9	N,M	53.2	Verified
				Base	DL, LL	995.5	-103.5	107.0	85.5	81.9	N,M	68.9	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL	977.8	93.1	-98.2	85.5	81.9	N,M	63.3	Verified
				3.00 m	DL, LL, E	834.4	-98.4	85.3	67.8	75.9	N,M	59.7	Verified
				Head	DL, LL, E	1038.5	67.8	-69.7	48.5	58.2	N,M	51.5	Verified
				3.00 m	DL, LL	995.5	-103.5	107.0	85.5	81.9	N,M	68.9	Verified
	Foundations	-0.15/0.00	50x50	Head	DL, LL	1248.1	88.2	-90.5	60.3	58.7	N,M	64.7	Verified
				Base	DL, LL, E	1056.1	-71.8	46.8	48.5	58.2	N,M	48.3	Verified
				Base	DL, LL	1265.8	-52.7	54.1	60.3	58.7	N,M	51.2	Verified
C7	techo	12.00/15.00	50x50	Base	DL, LL, E	220.3	80.2	-63.6	-46.6	-53.1	Q	59.5	Verified
				Base	DL, LL	254.3	70.1	-84.3	-60.3	-44.6	Q	70.9	Verified
				Head	DL, LL, E	439.0	-113.6	44.2	-38.1	-91.6	Q	69.5	Verified
	Floor 4	9.00/12.00	50x50	Base	DL, LL	576.4	83.1	-71.4	-58.9	-70.1	N,M	49.0	Verified
				Head	DL, LL	558.8	-85.3	69.9	-58.9	-70.1	N,M	48.9	Verified
				Head	DL, LL, E	663.0	-121.6	47.7	-38.6	-99.4	N,M	55.4	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, E	429.2	-100.1	28.2	-22.8	-81.6	Q	52.9	Verified
				Head	DL, LL	874.9	-79.2	70.7	-57.7	-65.4	N,M	51.3	Verified
				Base	DL, LL, E	897.0	133.6	-43.3	-36.0	-108.3	N,M	60.4	Verified
	Floor 2	3.00/6.00	50x50	Head	DL, LL, E	879.3	-126.3	43.1	-36.0	-108.3	N,M	58.0	Verified
				Base	DL, LL	1202.8	86.8	-67.3	-55.1	-70.1	N,M	58.6	Verified
				Head	DL, LL	1185.2	-81.5	64.9	-55.1	-70.1	N,M	56.6	Verified
				3.00 m	DL, LL, E	897.0	133.6	-43.3	-36.0	-108.3	N,M	60.4	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL, E	1096.0	-96.2	37.3	-23.2	-82.8	N,M	53.0	Verified
				Head	DL, LL	1490.5	-70.3	53.3	-35.4	-47.7	N,M	60.0	Verified
				Head	DL, LL, W	1176.5	-65.9	38.4	-25.9	-49.6	N,M	48.7	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1113.6	102.5	-18.3	-23.2	-82.8	N,M	52.5	Verified
				Base	DL, LL	1508.1	44.3	-31.7	-35.4	-47.7	N,M	55.1	Verified
C8	techo	12.00/15.00	40x30	Base	DL, LL, E	369.4	9.4	13.8	8.9	-1.1	N,M	32.0	Verified
				Head	DL, E	257.0	6.4	-7.3	8.7	0.1	N,M	21.1	Verified
				Base	DL, LL	409.2	12.5	1.1	1.1	-4.0	N,M	32.0	Verified
				Head	DL, LL	400.7	10.3	-1.4	1.1	-4.0	N,M	30.5	Verified
	Floor 4	9.00/12.00	40x30	Head	DL, LL, E	611.4	-28.8	18.7	-14.6	-19.7	N,M	59.6	Verified
				Head	DL, LL	762.5	-35.9	0.0	0.1	-23.9	N,M	67.3	Verified
	Floor 3	6.00/9.00	40x30	Base	DL, LL, E	895.5	25.6	24.5	19.6	-14.2	N,M	75.0	Verified
				Head	DL, E	579.3	-15.5	-24.2	19.3	-8.5	N,M	51.7	Verified
				Base	DL, LL	1145.7	34.6	1.4	1.0	-20.4	N,M	89.1	Verified
				Head	DL, LL	1136.8	-34.2	-1.2	1.0	-20.4	N,M	88.4	Verified
	Floor 2	3.00/6.00	40x30	Base	DL, LL, E	1175.4	35.7	26.1	20.5	-15.2	N,M	80.4	Verified
				Head	DL, E	752.3	-20.9	-24.5	19.9	-9.2	N,M	53.5	Verified
				Base	DL, LL	1532.7	50.6	2.9	2.0	-21.9	N,M	100.0	Verified
				Head	DL, LL	1523.8	-50.2	-2.2	2.0	-21.9	N,M	99.3	Verified
	Floor 1	0.00/3.00	40x30	Base	DL, LL, E	1476.3	48.1	17.1	13.3	-8.1	N,M	74.7	Verified
				Head	DL, E	937.5	-27.0	-15.3	12.7	-5.8	N,M	47.5	Verified
				Base	DL, LL	1945.2	71.5	1.7	1.8	-14.0	N,M	98.2	Verified
				Head	DL, LL	1936.3	-71.0	-2.7	1.8	-14.0	N,M	97.7	Verified
	Foundations	-0.22/0.00	40x30	Base	DL, LL, E	1476.3	48.1	17.1	13.3	-8.1	N,M	74.7	Verified
				Base	DL, LL	1945.2	71.5	1.7	1.8	-14.0	N,M	98.2	Verified
C9	techo	12.00/15.00	50x50	Base	DL, LL, E	367.7	112.5	46.0	31.8	-73.7	Q	63.0	Verified
				Base	DL, LL, E	368.6	115.2	43.0	29.7	-75.6	Q	64.8	Verified
				Base	DL, LL	437.8	127.4	42.0	28.6	-80.7	Q	76.9	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	681.5	-150.7	-43.7	35.6	-122.6	Q	66.6	Verified
				Head	DL, LL	895.6	-158.1	-41.4	33.8	-130.0	N,M	67.4	Verified



Column, shear wall and wall forces and reinforcement

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Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)			
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1008.9	-153.0	-38.6	31.4	-125.6	N,M	66.8	Verified
				Head	DL, LL	1369.1	-146.2	-36.1	29.3	-120.9	N,M	70.8	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1352.2	166.7	31.1	26.2	-135.1	N,M	75.5	Verified
				Head	DL, LL, E	1334.6	-157.5	-31.8	26.2	-135.1	N,M	72.7	Verified
				Base	DL, LL	1859.8	158.5	27.8	23.9	-128.4	N,M	84.5	Verified
				Head	DL, LL	1842.2	-149.6	-29.6	23.9	-128.4	N,M	82.2	Verified
	Floor 1	0.00/3.00	50x50	3.00 m	DL, LL, E	1352.2	166.7	31.1	26.2	-135.1	N,M	75.5	Verified
				Head	DL, LL, E	1669.5	-125.4	-18.1	13.7	-98.5	N,M	71.5	Verified
				Head	DL, LL	2321.4	-128.5	-18.7	12.6	-86.4	N,M	90.3	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1884.8	8.1	-3.8	0.8	-29.2	N,M	69.5	Verified
				Base	DL, LL	2339.0	78.8	11.4	12.6	-86.4	N,M	85.5	Verified
C10	techo	12.00/15.00	50x50	Base	DL, LL, E	343.5	145.9	-19.2	-14.0	-95.4	Q	84.4	Verified
				Base	DL, LL	391.1	164.2	-19.6	-14.2	-105.9	Q	63.9	Verified
				Head	DL, LL	373.5	-90.0	14.4	-14.2	-105.9	Q	72.2	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	529.8	-185.7	16.6	-13.5	-152.6	Q	78.5	Verified
				Head	DL, LL	740.0	-193.4	14.7	-12.2	-158.8	Q	86.0	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	718.8	-186.1	15.9	-12.6	-153.4	Q	73.0	Verified
				Head	DL, LL, E	715.5	-186.2	16.2	-12.8	-153.5	Q	73.2	Verified
				Head	DL, LL	1125.4	-175.6	12.7	-10.1	-144.1	N,M	71.5	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	926.2	186.4	-10.5	-9.4	-154.3	N,M	71.1	Verified
				Base	DL, E	500.3	142.1	-8.7	-7.6	-117.2	Q	92.1	Verified
				Head	DL, LL	1556.7	-162.5	8.1	-6.0	-134.7	N,M	76.6	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	2034.0	-3.2	6.8	4.5	-14.5	N,M	75.1	Verified
				Head	DL, LL, E	1169.0	-133.7	5.6	-5.4	-100.9	N,M	60.2	Verified
				Head	DL, LL	2085.1	-118.7	3.1	-1.9	-79.7	N,M	81.2	Verified
				Head	DL, LL, W	1480.7	-100.9	2.1	-1.7	-71.2	N,M	60.8	Verified
	Foundations	-0.15/0.00	50x50	Base	DL, LL, E	2034.0	-3.2	6.8	4.5	-14.5	N,M	75.1	Verified
				Base	DL, LL	2102.7	72.6	-1.6	-1.9	-79.7	N,M	76.8	Verified
C11	techo	12.00/15.00	40x30	Base	DL, LL, E	288.2	15.9	-12.8	-7.7	-8.9	N,M	31.8	Verified
				Head	DL, LL, E	279.3	-7.6	6.5	-7.7	-8.9	N,M	22.7	Verified
				Base	DL, LL	323.1	22.3	-1.5	-0.9	-12.4	N,M	34.1	Verified
				Head	DL, LL	314.2	-10.5	0.8	-0.9	-12.4	N,M	25.1	Verified
	Floor 4	9.00/12.00	40x30	Head	DL, LL, E	511.3	-23.5	22.9	-18.0	-16.7	N,M	53.0	Verified
				Head	DL, LL	640.7	-33.6	1.9	-1.5	-23.4	N,M	59.2	Verified
	Floor 3	6.00/9.00	40x30	Base	DL, LL, E	758.5	21.8	-24.9	-20.0	-15.2	N,M	65.4	Verified
				Head	DL, E	485.6	-13.0	24.8	-19.7	-9.4	N,M	45.9	Verified
				Base	DL, LL	983.7	31.7	-1.2	-1.0	-21.1	N,M	77.8	Verified
				Head	DL, LL	974.9	-32.2	1.4	-1.0	-21.1	N,M	77.6	Verified
	Floor 2	3.00/6.00	40x30	Base	DL, LL, E	1004.8	29.4	-24.8	-19.7	-15.5	N,M	79.6	Verified
				Head	DL, E	636.7	-17.2	24.2	-19.5	-9.5	N,M	53.1	Verified
				Base	DL, LL	1328.6	41.8	-0.6	-0.6	-21.5	N,M	99.9	Verified
	Floor 1	0.00/3.00	40x30	Head	DL, LL	1319.8	-41.4	0.8	-0.6	-21.5	N,M	99.2	Verified
				Base	DL, LL, E	1283.6	40.0	1.3	1.0	-4.8	N,M	74.3	Verified
				Head	DL, E	796.1	-22.3	14.3	-12.1	-6.0	N,M	46.3	Verified
				Base	DL, LL	1691.6	58.2	-0.1	-0.2	-13.5	N,M	98.8	Verified
	Foundations	-0.17/0.00	40x30	Head	DL, LL	1682.7	-57.7	0.3	-0.2	-13.5	N,M	98.2	Verified
				Base	DL, LL, E	1283.6	40.0	1.3	1.0	-4.8	N,M	74.3	Verified
				Base	DL, LL	1691.6	58.2	-0.1	-0.2	-13.5	N,M	98.8	Verified
C12	techo	12.00/15.00	50x50	Base	DL, LL, E	363.5	127.6	23.8	17.4	-85.8	Q	74.2	Verified
				Base	DL, LL, E	369.1	130.3	15.7	11.6	-87.7	Q	75.7	Verified
				Base	DL, LL	424.9	148.0	20.2	14.6	-96.8	Q	94.8	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	694.7	-146.8	-23.7	19.2	-120.5	N,M	57.9	Verified
				Head	DL, LL, E	705.7	-151.9	-10.0	8.3	-124.5	N,M	57.3	Verified
				Head	DL, LL	895.0	-168.3	-15.3	12.6	-138.8	N,M	65.9	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1060.9	-151.7	-8.4	6.7	-124.7	N,M	63.3	Verified
				Head	DL, LL	1385.0	-158.2	-13.6	10.8	-130.4	N,M	71.9	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1436.3	159.1	2.8	2.9	-129.1	N,M	72.5	Verified
				Head	DL, LL, E	1418.6	-150.9	-4.1	2.9	-129.1	N,M	70.3	Verified
				Base	DL, LL	1897.0	165.4	7.2	6.7	-134.7	N,M	85.6	Verified
				Head	DL, LL	1879.4	-157.9	-9.0	6.7	-134.7	N,M	83.5	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL, E	1927.2	-95.4	19.9	-23.6	-64.8	N,M	73.0	Verified
				Head	DL, LL, E	1792.0	-117.5	0.2	-0.8	-88.6	N,M	72.7	Verified
				Head	DL, LL	2391.1	-132.8	-3.3	2.3	-88.9	N,M	92.5	Verified



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN·m)	Myy (kN·m)	Qx (kN)	Qy (kN)			
C13	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1944.8	60.2	-36.7	-23.6	-64.8	N,M	71.8	Verified
				Base	DL, LL	2408.7	80.6	2.2	2.3	-88.9	N,M	88.0	Verified
	techo	12.00/15.00	50x50	Base	DL, LL, E	320.9	53.3	-13.5	-9.5	-33.2	N,M	22.9	Verified
				Head	DL, LL, E	303.2	-26.4	9.2	-9.4	-33.2	N,M	14.5	Verified
				Base	DL, LL	360.5	55.2	3.2	1.8	-32.7	N,M	22.5	Verified
				Head	DL, LL	342.9	-23.2	-1.2	1.8	-32.7	Q	14.5	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	572.3	-86.4	20.6	-16.5	-69.1	N,M	37.5	Verified
				Head	DL, LL	718.7	-79.6	-5.2	4.2	-64.9	N,M	36.5	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	847.2	-84.0	23.4	-19.3	-69.0	N,M	42.4	Verified
				Head	DL, LL, E	847.1	-83.9	23.4	-19.3	-69.0	N,M	42.4	Verified
				Base	DL, LL	1119.9	69.8	4.5	3.8	-58.7	N,M	44.9	Verified
				Head	DL, LL	1102.2	-71.0	-4.6	3.8	-58.7	N,M	44.6	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1146.5	92.7	-23.9	-19.3	-73.9	N,M	51.6	Verified
				Head	DL, LL, E	1128.8	-84.6	22.4	-19.3	-73.9	N,M	49.2	Verified
				Base	DL, LL	1512.9	77.4	5.0	4.1	-62.8	N,M	57.4	Verified
				Head	DL, LL	1495.3	-73.3	-4.7	4.1	-62.8	N,M	56.1	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1576.8	22.9	43.3	31.0	-27.3	N,M	58.2	Verified
				Head	DL, LL, E	1424.8	-61.5	11.8	-12.7	-52.0	N,M	52.6	Verified
				Base	DL, LL	1922.4	38.7	2.6	2.7	-42.5	N,M	70.2	Verified
				Head	DL, LL, W	1468.8	-52.1	-3.3	2.6	-39.0	N,M	53.7	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1576.8	22.9	43.3	31.0	-27.3	N,M	58.2	Verified
				Base	DL, LL	1922.4	38.7	2.6	2.7	-42.5	N,M	70.2	Verified
C14	techo	12.00/15.00	50x50	Base	DL, LL, E	106.9	57.6	-3.5	-2.3	-39.4	Q	35.3	Verified
				Base	DL, LL, E	107.0	57.6	-3.5	-2.2	-39.5	Q	35.3	Verified
				Base	DL, LL	139.9	49.9	10.3	6.3	-32.3	Q	31.9	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	208.1	-74.2	12.2	-9.2	-57.1	Q	48.6	Verified
				Head	DL, LL	333.0	-53.6	-13.1	10.4	-42.6	N,M	23.1	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	312.3	-79.0	15.6	-12.4	-61.9	Q	45.6	Verified
				Base	DL, LL	565.3	50.2	13.2	10.5	-40.8	N,M	26.7	Verified
				Head	DL, LL	547.0	-51.9	-13.0	10.5	-40.8	N,M	26.6	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	891.1	15.2	47.2	35.3	-12.1	N,M	34.8	Verified
				Base	DL, E	220.9	70.6	-19.8	-15.4	-53.4	Q	44.9	Verified
				Base	DL, LL	785.5	55.2	18.8	13.9	-43.0	N,M	33.8	Verified
				Head	DL, LL	767.1	-52.3	-16.0	13.9	-43.0	N,M	32.5	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1154.8	2.9	39.7	27.3	-8.5	N,M	42.6	Verified
				Base	DL, LL, E	551.9	66.0	-13.6	-6.9	-47.5	N,M	30.4	Verified
				Head	DL, LL	1000.2	-44.7	-16.6	10.5	-28.3	N,M	37.4	Verified
				Head	DL, LL, W	790.8	-37.0	-9.4	6.3	-28.0	N,M	29.6	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1154.8	2.9	39.7	27.3	-8.5	N,M	42.6	Verified
				Base	DL, LL	1018.6	26.1	9.8	10.5	-28.3	N,M	37.2	Verified
C15	techo	12.00/15.00	50x50	Base	DL, LL, E	211.5	-32.9	-104.3	-83.1	22.4	Q	73.4	Verified
				Base	DL, LL, E	212.6	-6.2	-109.0	-87.3	4.4	Q	76.7	Verified
				Base	DL, LL	226.3	-2.9	-123.1	-94.2	2.3	Q	94.5	Verified
	Floor 4	9.00/12.00	50x50	12.00 m	DL, LL, E	211.5	-32.9	-104.3	-83.1	22.4	N,M	40.1	Verified
				Head	DL, E	266.6	60.9	30.4	-28.1	48.5	Q	31.8	Verified
				12.00 m	DL, LL	226.3	-2.9	-123.1	-94.2	2.3	N,M	40.7	Verified
				Head	DL, LL	447.2	2.7	73.6	-65.2	2.2	N,M	29.3	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	571.8	75.6	73.6	-59.2	61.8	N,M	47.5	Verified
				Head	DL, LL	683.5	2.3	92.5	-75.1	2.0	N,M	39.1	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	775.1	-84.3	-71.5	-57.1	68.5	N,M	51.3	Verified
				Head	DL, LL, E	757.4	80.1	65.5	-57.1	68.5	N,M	48.3	Verified
				Base	DL, LL	935.6	-4.3	-91.4	-73.7	3.0	N,M	44.5	Verified
				Head	DL, LL	917.9	2.8	85.5	-73.7	3.0	N,M	42.7	Verified
	Floor 1	0.00/3.00	50x50	3.00 m	DL, LL, E	775.1	-84.3	-71.5	-57.1	68.5	N,M	51.3	Verified
				Head	DL, LL, E	933.6	56.7	55.2	-40.1	55.1	N,M	43.9	Verified
				Head	DL, LL	1141.1	5.6	75.4	-50.1	2.8	N,M	46.6	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	951.2	-75.7	-41.1	-40.1	55.1	N,M	45.7	Verified
				Base	DL, LL	1158.7	-1.2	-44.8	-50.1	2.8	N,M	42.3	Verified
C16	techo	12.00/15.00	50x50	Base	DL, LL, E	319.7	-3.6	88.8	66.9	2.9	Q	52.9	Verified
				Base	DL, LL	347.9	-7.0	89.5	65.5	5.0	Q	56.2	Verified



Column, shear wall and wall forces and reinforcement

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Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN·m)	Myy (kN·m)	Qx (kN)	Qy (kN)			
	Floor 4	9.00/12.00	50x50	12.00 m	DL, LL, E	319.7	-3.6	88.8	66.9	2.9	N,M	32.7	Verified
				Head	DL, LL, E	509.7	3.1	-69.2	55.6	2.5	N,M	29.3	Verified
				12.00 m	DL, LL	347.9	-7.0	89.5	65.5	5.0	N,M	33.6	Verified
				Head	DL, LL	625.1	6.5	-63.4	52.3	5.2	N,M	30.6	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	737.2	-48.2	-62.0	48.3	-37.6	N,M	39.3	Verified
				Head	DL, LL, E	719.6	3.4	-81.5	63.6	2.7	N,M	36.9	Verified
				Base	DL, LL	941.7	-6.3	67.8	55.4	4.9	N,M	39.8	Verified
				Head	DL, LL	923.3	6.0	-70.8	55.4	4.9	N,M	39.6	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	973.7	51.0	60.0	46.7	-40.5	N,M	44.6	Verified
				Head	DL, LL, E	928.2	4.4	-75.3	62.6	4.1	N,M	40.6	Verified
				Base	DL, LL	1239.0	-9.4	68.2	53.6	6.6	N,M	48.2	Verified
				Head	DL, LL	1220.6	7.2	-65.8	53.6	6.6	N,M	47.0	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1247.5	-2.8	-9.3	6.0	3.8	N,M	46.0	Verified
				Head	DL, E	761.0	-33.0	-28.3	21.2	-34.6	N,M	30.3	Verified
				Base	DL, LL	1528.0	-3.8	30.9	33.4	5.3	N,M	55.8	Verified
				Head	DL, LL	1509.6	9.5	-52.6	33.4	5.3	N,M	55.2	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1247.5	-2.8	-9.3	6.0	3.8	N,M	46.0	Verified
				Base	DL, LL	1528.0	-3.8	30.9	33.4	5.3	N,M	55.8	Verified
C17	techo	12.00/15.00	50x50	Base	DL, LL, E	191.4	-27.4	-67.5	-51.8	18.6	Q	44.6	Verified
				Base	DL, LL, E	193.0	-1.7	-72.8	-56.2	1.3	Q	48.1	Verified
				Base	DL, LL	208.4	4.5	-78.2	-58.1	-2.8	Q	56.6	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	357.3	57.2	46.4	-39.3	45.4	N,M	32.4	Verified
				Head	DL, E	231.2	-62.1	13.4	-13.3	-49.5	Q	38.3	Verified
				12.00 m	DL, LL	208.4	4.5	-78.2	-58.1	-2.8	N,M	25.6	Verified
				Head	DL, LL	409.9	-4.3	54.5	-46.7	-3.5	N,M	23.9	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	538.3	71.3	53.9	-43.3	58.3	N,M	40.5	Verified
				Head	DL, E	335.5	-76.1	18.0	-14.6	-62.1	Q	37.1	Verified
				Head	DL, LL	623.2	-4.0	59.2	-48.0	-3.2	N,M	29.7	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	735.1	-79.2	-50.0	-40.5	64.5	N,M	44.2	Verified
				Head	DL, E	496.5	76.9	32.8	-28.3	65.5	N,M	36.5	Verified
				Base	DL, LL	848.7	4.2	-53.8	-44.2	-3.5	N,M	34.2	Verified
				Head	DL, LL	831.0	-4.3	52.4	-44.2	-3.5	N,M	33.6	Verified
	Floor 1	0.00/3.00	50x50	3.00 m	DL, LL, E	735.1	-79.2	-50.0	-40.5	64.5	N,M	44.2	Verified
				Head	DL, E	529.9	-54.4	14.9	-4.5	-54.7	N,M	27.0	Verified
				Base	DL, LL	1049.5	3.5	-24.9	-28.1	-2.4	N,M	38.3	Verified
				Head	DL, LL	1031.8	-2.3	42.5	-28.1	-2.4	N,M	37.7	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	908.9	-72.8	-33.1	-28.3	51.9	N,M	42.8	Verified
				Base	DL, LL	1049.5	3.5	-24.9	-28.1	-2.4	N,M	38.3	Verified
C18	techo	12.00/15.00	40x30	Base	DL, LL, E	397.5	10.3	14.2	9.0	-6.1	N,M	34.2	Verified
				Head	DL, LL, E	388.7	-10.0	-8.4	9.0	-6.1	N,M	31.0	Verified
				Base	DL	445.9	11.6	2.0	1.9	-6.4	N,M	33.9	Verified
				Head	DL, LL	417.3	-10.8	-2.4	1.8	-6.4	N,M	31.8	Verified
	Floor 4	9.00/12.00	40x30	Base	DL, LL, E	592.9	15.9	22.5	18.1	-0.5	N,M	51.9	Verified
				Head	DL, E	394.5	10.2	22.9	-17.9	1.1	N,M	38.7	Verified
				Base	DL, LL	701.0	19.2	0.9	0.5	-0.6	N,M	53.4	Verified
				Head	DL, W	397.5	10.3	2.4	-1.8	0.4	N,M	30.3	Verified
	Floor 3	6.00/9.00	40x30	Base	DL, LL, E	804.4	22.5	26.6	21.3	-1.5	N,M	69.1	Verified
				Head	DL, E	532.2	-14.1	-26.3	21.0	-1.1	N,M	49.7	Verified
				Base	DL, LL	992.0	28.9	1.5	1.2	-1.6	N,M	76.5	Verified
				Head	DL, LL, W	790.1	-22.1	-3.9	3.1	-0.9	N,M	60.6	Verified
	Floor 2	3.00/6.00	40x30	Base	DL, LL, E	1027.9	30.2	27.4	21.6	-1.5	N,M	84.6	Verified
				Head	DL, E	671.6	-18.3	-26.1	21.2	-1.0	N,M	58.4	Verified
				Base	DL, LL	1297.0	40.5	2.2	1.6	-1.6	N,M	99.0	Verified
				Head	DL, LL, W	1010.1	-29.6	-4.3	3.6	-0.8	N,M	76.1	Verified
	Floor 1	0.00/3.00	40x30	Base	DL, LL, E	1271.0	39.5	17.6	13.6	-1.0	N,M	77.3	Verified
				Head	DL, E	823.9	-23.2	-16.0	13.3	-0.7	N,M	50.4	Verified
				Base	DL, LL	1627.2	55.0	1.3	1.3	-1.1	N,M	98.1	Verified
				Head	DL, LL, W	1247.3	-38.5	-1.9	1.4	-2.9	N,M	73.6	Verified
	Foundations	-0.15/0.00	40x30	Base	DL, LL, E	1271.0	39.5	17.6	13.6	-1.0	N,M	77.3	Verified
				Base	DL, LL	1627.2	55.0	1.3	1.3	-1.1	N,M	98.1	Verified



Column, shear wall and wall forces and reinforcement

edificio 2.0

Date: 11/20/20

Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN·m)	Myy (kN·m)	Qx (kN)	Qy (kN)			
C19	techo	12.00/15.00	50x50	Base	DL, LL, E	308.5	-6.9	58.0	39.2	4.8	N,M	23.6	Verified
				Base	DL, E	217.5	-6.1	47.5	32.1	4.2	N,M	18.7	Verified
				Base	DL, LL	352.5	-3.2	39.1	26.3	2.3	N,M	18.3	Verified
				Head	DL, LL	334.9	2.3	-24.0	26.3	2.3	N,M	14.0	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	489.7	11.9	-70.9	55.1	9.2	N,M	30.4	Verified
				Base	DL, LL	643.2	-3.6	36.1	29.4	2.9	N,M	25.1	Verified
				Head	DL, LL	624.8	3.5	-37.5	29.4	2.9	N,M	24.8	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	737.5	-48.2	-42.9	33.6	-37.6	N,M	35.2	Verified
				Head	DL, LL, E	685.3	2.0	-74.3	58.4	1.6	N,M	34.3	Verified
				Base	DL, LL	931.4	-3.3	30.8	25.4	2.6	N,M	34.0	Verified
				Head	DL, LL	913.0	3.2	-32.7	25.4	2.6	N,M	33.4	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	960.5	54.5	40.2	31.9	-42.6	N,M	41.2	Verified
				Head	DL, LL, E	871.3	1.2	-68.6	55.8	0.9	N,M	37.5	Verified
				Base	DL, LL	1215.9	-2.2	24.9	20.6	1.7	N,M	44.4	Verified
				Head	DL, LL, W	946.1	1.8	-25.9	20.3	1.5	N,M	34.6	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1297.3	-0.5	-33.1	-19.5	0.8	N,M	47.9	Verified
				Head	DL, E	743.8	-35.4	-20.4	17.9	-36.1	N,M	29.2	Verified
				Base	DL, LL	1498.5	0.6	10.0	10.5	0.5	N,M	54.8	Verified
				Head	DL, LL, W	1172.2	-9.9	-12.8	8.6	-10.7	N,M	42.8	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1297.3	-0.5	-33.1	-19.5	0.8	N,M	47.9	Verified
				Base	DL, LL	1498.5	0.6	10.0	10.5	0.5	N,M	54.8	Verified
C20	techo	12.00/15.00	50x50	Base	DL, LL, E	246.5	-57.8	-26.9	-18.8	38.1	Q	27.4	Verified
				Base	DL, LL	290.4	-44.9	-20.1	-14.0	29.6	N,M	21.5	Verified
				Head	DL, LL	272.0	29.1	14.9	-14.0	29.6	N,M	15.5	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	342.9	76.3	30.9	-23.7	59.7	Q	34.6	Verified
				Head	DL, E	212.7	64.4	25.3	-19.4	50.4	Q	41.8	Verified
				Base	DL, LL	507.5	-45.5	-16.0	-13.1	37.0	N,M	24.6	Verified
				Head	DL, LL	489.1	46.9	16.6	-13.1	37.0	N,M	24.6	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	441.9	81.1	31.0	-24.0	63.9	N,M	36.7	Verified
				Head	DL, E	271.9	73.2	8.7	-6.6	57.8	Q	44.5	Verified
				Base	DL, LL	734.5	-39.3	-12.4	-10.5	32.2	N,M	28.8	Verified
				Head	DL, LL, W	561.9	44.7	10.8	-8.1	34.9	N,M	25.0	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1037.7	32.1	17.1	12.5	-24.3	N,M	38.3	Verified
				Head	DL, E	281.7	71.1	22.5	-18.1	57.5	Q	42.3	Verified
				Base	DL, LL	974.7	-32.9	-6.9	-6.3	26.8	N,M	35.6	Verified
				Head	DL, LL, W	723.1	41.9	7.0	-4.9	33.3	N,M	28.6	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1326.6	38.6	18.5	11.4	-24.1	N,M	49.0	Verified
				Head	DL, E	326.8	49.0	11.8	-12.3	40.7	N,M	21.3	Verified
				Base	DL, LL	1236.2	-12.0	-1.5	-2.0	14.0	N,M	45.2	Verified
				Head	DL, LL, W	899.7	29.7	2.7	-1.9	21.7	N,M	32.9	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1326.6	38.6	18.5	11.4	-24.1	N,M	49.0	Verified
				Base	DL, LL	1236.2	-12.0	-1.5	-2.0	14.0	N,M	45.2	Verified
C21	techo	12.00/15.00	30x30	Base	DL, LL, E	277.2	-7.1	-7.6	-4.2	1.5	N,M	32.1	Verified
				Head	DL, E	197.2	5.0	5.0	-4.1	0.9	N,M	22.4	Verified
				Base	DL	313.9	-8.1	-8.1	-0.2	1.8	N,M	36.0	Verified
				Head	DL, LL	287.3	7.4	7.4	-0.2	2.2	N,M	32.9	Verified
	Floor 4	9.00/12.00	30x30	Base	DL, LL, E	434.6	-11.6	-14.5	-10.5	2.0	N,M	52.9	Verified
				Head	DL, E	293.0	7.6	14.0	-10.4	1.1	N,M	39.8	Verified
				Base	DL, LL	516.4	-14.1	-14.1	-0.4	3.3	N,M	60.4	Verified
				Head	DL, LL, W	426.6	11.4	11.4	-0.1	3.4	N,M	49.5	Verified
	Floor 3	6.00/9.00	30x30	Base	DL, LL, E	606.6	17.0	17.0	0.2	-2.3	N,M	71.7	Verified
				Head	DL, E	396.4	10.5	16.1	-11.7	0.8	N,M	51.1	Verified
				Base	DL, LL	751.8	-22.0	-22.0	-0.2	2.7	N,M	90.3	Verified
				Head	DL, LL, W	594.2	16.6	-16.6	0.1	3.3	N,M	70.1	Verified
	Floor 2	3.00/6.00	30x30	Base	DL, LL, E	789.2	23.3	23.3	0.4	-3.1	N,M	76.2	Verified
				Head	DL, E	505.9	13.8	-16.0	11.3	1.6	N,M	48.8	Verified
				Base	DL, LL	1004.3	-31.7	-31.7	-0.1	2.2	N,M	99.2	Verified
				Head	DL, LL, W	775.4	22.8	-22.8	0.3	3.0	N,M	74.8	Verified
	Floor 1	0.00/3.00	30x30	Base	DL, LL, E	989.2	31.1	31.1	0.4	-2.9	N,M	70.0	Verified
				Head	DL, E	629.2	17.8	-17.8	6.7	0.9	N,M	42.6	Verified
				Base	DL, LL	1280.7	-44.2	44.2	0.0	1.1	N,M	94.4	Verified
				Head	DL, W	628.9	17.8	17.8	-0.3	1.7	N,M	42.6	Verified



Column, shear wall and wall forces and reinforcement

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Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN·m)	Myy (kN·m)	Qx (kN)	Qy (kN)			
C22	Foundations	-0.16/0.00	30x30	Base	DL, LL, E	989.2	31.1	31.1	0.4	-2.9	N,M	70.0	Verified
				Base	DL, LL	1280.7	-44.2	44.2	0.0	1.1	N,M	94.4	Verified
	techo	12.00/15.00	50x50	Base	DL, LL, E	284.3	-37.9	33.7	23.4	26.7	N,M	22.9	Verified
				Head	DL, LL, E	265.9	28.8	-24.8	23.4	26.7	N,M	17.6	Verified
				Base	DL, LL	329.3	-29.2	20.8	14.4	20.5	N,M	17.8	Verified
				Head	DL, LL	310.9	22.2	-15.2	14.4	20.5	N,M	14.7	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	476.4	43.4	-43.0	32.8	34.0	N,M	29.1	Verified
				Base	DL, LL	625.9	-25.3	16.9	13.8	20.1	N,M	23.7	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	607.5	25.0	-17.6	13.8	20.1	N,M	23.2	Verified
				Head	DL, LL, E	684.8	46.0	-45.0	35.1	36.2	N,M	34.0	Verified
				Base	DL, LL	923.6	-23.0	13.7	11.5	18.8	N,M	33.7	Verified
				Head	DL, LL, W	739.5	28.4	-12.0	9.1	22.0	N,M	27.0	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1082.8	5.7	-34.3	-25.4	-4.0	N,M	40.0	Verified
				Head	DL, LL, E	891.5	41.8	-39.9	32.7	34.3	N,M	37.1	Verified
				Base	DL, LL	1220.5	-20.6	8.6	7.6	16.4	N,M	44.6	Verified
				Head	DL, LL, W	968.7	26.4	-8.2	6.0	21.4	N,M	35.4	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1336.5	9.0	-33.0	-20.1	-3.3	N,M	49.3	Verified
				Head	DL, E	703.1	21.2	-18.8	20.7	19.1	N,M	25.9	Verified
				Base	DL, LL	1518.6	-7.8	3.0	2.9	9.2	N,M	55.5	Verified
				Head	DL, LL, W	1200.0	18.3	-2.8	2.3	14.5	N,M	43.8	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1336.5	9.0	-33.0	-20.1	-3.3	N,M	49.3	Verified
				Base	DL, LL	1518.6	-7.8	3.0	2.9	9.2	N,M	55.5	Verified
C23	techo	12.00/15.00	50x50	Base	DL, LL, E	334.2	42.0	-27.7	-18.9	-29.9	N,M	23.0	Verified
				Head	DL, LL, E	316.5	-29.7	17.5	-18.8	-29.9	N,M	17.0	Verified
				Base	DL, LL	360.6	24.9	-3.5	-2.6	-16.9	N,M	15.0	Verified
				Head	DL, LL, W	318.3	-18.7	3.0	-2.7	-18.8	N,M	12.6	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	516.6	-50.2	41.4	-32.2	-39.0	N,M	31.0	Verified
				Base	DL, LL	648.5	23.3	-2.4	-1.8	-18.5	N,M	23.7	Verified
				Head	DL, LL, W	531.2	-26.0	2.7	-2.3	-20.5	N,M	19.9	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	716.8	-57.5	47.3	-37.5	-45.3	N,M	37.7	Verified
				Head	DL, E	469.8	-50.8	46.7	-37.0	-40.0	N,M	31.9	Verified
				Base	DL, LL	942.4	24.2	-2.4	-1.9	-19.6	N,M	34.4	Verified
				Head	DL, LL, W	749.6	-30.7	3.6	-2.8	-24.0	N,M	27.4	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	952.4	62.8	-33.6	-26.0	-48.1	N,M	41.6	Verified
				Head	DL, LL, E	934.1	-57.4	31.5	-26.1	-48.1	N,M	39.7	Verified
				Base	DL, LL	1241.4	28.6	-2.4	-1.9	-22.2	N,M	45.4	Verified
				Head	DL, LL, W	970.7	-33.0	3.6	-3.0	-27.3	N,M	35.5	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1307.5	-16.3	39.1	26.2	5.5	N,M	48.2	Verified
				Head	DL, E	707.6	-25.1	29.0	-27.6	-23.3	N,M	27.7	Verified
				Base	DL, LL	1549.8	14.2	-0.7	-1.2	-15.1	N,M	56.6	Verified
				Head	DL, LL, W	1198.6	-25.3	2.8	-1.9	-20.0	N,M	43.8	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1307.5	-16.3	39.1	26.2	5.5	N,M	48.2	Verified
				Base	DL, LL	1549.8	14.2	-0.7	-1.2	-15.1	N,M	56.6	Verified
C24	techo	12.00/15.00	50x50	Base	DL, LL, E	81.6	-18.7	8.1	5.5	15.4	Q	9.6	Verified
				Head	DL, LL, E	63.2	19.9	-5.7	5.5	15.4	Q	12.9	Verified
				Head	DL, LL, W	58.1	9.3	-3.9	3.8	6.0	N,M	4.4	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	202.7	30.0	-16.5	12.8	22.1	N,M	15.2	Verified
				Head	DL, E	78.9	-40.5	7.7	-5.9	-29.4	Q	26.2	Verified
				Head	DL, LL, W	164.1	-15.7	-5.5	4.3	-11.1	N,M	8.2	Verified
				Head	DL, W	151.7	-16.1	-4.4	3.5	-11.4	N,M	7.9	Verified
	Floor 3	6.00/9.00	50x50	Base	DL, LL, E	450.7	-1.0	41.3	32.8	0.8	N,M	21.1	Verified
				Head	DL, E	95.4	-42.8	13.9	-11.4	-33.4	Q	29.6	Verified
				Base	DL, LL	335.6	2.6	6.5	5.3	-2.0	N,M	12.3	Verified
				Head	DL, W	242.6	-15.3	-3.3	2.5	-11.8	N,M	9.9	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	671.1	-0.4	51.4	38.8	-0.4	N,M	28.9	Verified
				Base	DL, E	94.6	45.6	-23.9	-17.6	-34.2	Q	32.8	Verified
				Base	DL, LL	455.4	4.0	5.5	4.5	-3.3	N,M	16.6	Verified
				Head	DL, W	328.1	-17.1	-2.1	1.5	-14.2	N,M	12.5	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	885.2	-5.4	42.3	28.7	1.0	N,M	33.1	Verified
				Base	DL, E	92.5	48.8	-21.0	-13.6	-28.3	Q	27.1	Verified
				Base	DL, LL	569.1	2.3	2.5	2.4	-2.4	N,M	20.8	Verified
				Head	DL, W	410.0	-10.6	-1.1	0.5	-11.3	N,M	15.0	Verified



Column, shear wall and wall forces and reinforcement

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Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN·m)	Myy (kN·m)	Qx (kN)	Qy (kN)			
C25	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	885.2	-5.4	42.3	28.7	1.0	N,M	33.1	Verified
				Base	DL, LL	569.1	2.3	2.5	2.4	-2.4	N,M	20.8	Verified
	techo	12.00/15.00	50x50	Base	DL, LL, E	138.7	35.7	-78.1	-60.4	-25.9	Q	57.0	Verified
				Base	DL, LL, E	130.5	10.3	-83.9	-66.5	-7.0	Q	59.3	Verified
				Base	DL, LL	144.0	25.3	-92.4	-69.8	-17.4	Q	71.2	Verified
	Floor 4	9.00/12.00	50x50	12.00 m	DL, LL, E	138.7	35.7	-78.1	-60.4	-25.9	N,M	34.6	Verified
				Head	DL, LL, E	247.6	2.8	56.4	-47.6	0.9	Q	28.1	Verified
				12.00 m	DL, LL	144.0	25.3	-92.4	-69.8	-17.4	N,M	36.7	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	302.1	-22.9	60.1	-52.8	-19.2	N,M	26.7	Verified
				Head	DL, LL, E	467.9	-63.3	50.5	-41.5	-50.7	N,M	36.6	Verified
				Head	DL, LL	475.5	-23.0	73.4	-59.6	-18.8	N,M	32.8	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	666.9	68.8	-50.7	-41.0	-55.6	N,M	40.5	Verified
				Head	DL, LL, E	649.2	-64.7	47.6	-41.0	-55.6	N,M	38.4	Verified
				Base	DL, LL	666.1	24.2	-75.7	-60.5	-19.7	N,M	36.8	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL	648.5	-23.1	69.4	-60.5	-19.7	N,M	34.6	Verified
				3.00 m	DL, LL, E	666.9	68.8	-50.7	-41.0	-55.6	N,M	40.5	Verified
				Head	DL, LL, E	823.4	-44.0	49.2	-25.5	-48.0	N,M	37.6	Verified
	Foundations	-0.17/0.00	50x50	3.00 m	DL, LL	666.1	24.2	-75.7	-60.5	-19.7	N,M	36.8	Verified
				Head	DL, LL	817.7	-18.8	64.5	-42.7	-13.4	N,M	36.7	Verified
				Base	DL, LL, E	841.0	71.2	-11.9	-25.5	-48.0	N,M	38.1	Verified
				Base	DL, LL	835.3	13.4	-37.9	-42.7	-13.4	N,M	31.3	Verified
C26	techo	12.00/15.00	50x50	Base	DL, LL, E	265.3	47.8	10.7	8.3	-35.0	N,M	20.0	Verified
				Head	DL, LL, E	246.9	-39.7	-10.1	8.3	-35.0	N,M	17.2	Verified
				Base	DL, LL	283.6	44.2	6.7	5.3	-31.1	N,M	18.5	Verified
				Head	DL, LL	265.2	-33.6	-6.4	5.3	-31.1	N,M	15.1	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	501.1	-51.0	-14.3	10.6	-39.3	N,M	25.5	Verified
				Base	DL, LL	579.8	37.0	3.8	2.8	-29.1	N,M	23.4	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL	561.4	-35.8	-3.2	2.8	-29.1	N,M	22.7	Verified
				Head	DL, LL, E	761.2	-59.9	-17.9	13.5	-46.2	N,M	34.2	Verified
				Base	DL, LL	874.4	36.9	3.7	3.2	-30.0	N,M	32.0	Verified
				Head	DL, LL	856.0	-38.2	-4.2	3.2	-30.0	N,M	31.5	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1041.9	64.5	19.0	14.3	-50.0	N,M	42.6	Verified
				Head	DL, LL, E	1023.5	-60.5	-16.8	14.3	-50.0	N,M	41.1	Verified
				Base	DL, LL	1168.7	41.0	3.2	2.5	-31.8	N,M	42.7	Verified
				Head	DL, LL, W	960.8	-37.0	-3.7	3.0	-30.2	N,M	35.1	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1299.4	60.3	22.9	13.2	-41.7	N,M	49.2	Verified
				Head	DL, LL, E	1281.0	-43.9	-10.0	13.2	-41.7	N,M	47.3	Verified
				Base	DL, LL	1460.7	20.6	2.0	1.6	-21.2	N,M	53.4	Verified
				Head	DL, LL, W	1199.7	-30.3	-3.0	2.9	-23.6	N,M	43.8	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1299.4	60.3	22.9	13.2	-41.7	N,M	49.2	Verified
				Base	DL, LL	1460.7	20.6	2.0	1.6	-21.2	N,M	53.4	Verified
C27	techo	12.00/15.00	50x50	Base	DL, LL, E	273.3	50.4	4.8	3.7	-38.0	N,M	19.9	Verified
				Head	DL, LL, E	254.8	-44.8	0.9	-0.8	-38.1	N,M	17.5	Verified
				Base	DL, LL	291.9	48.0	-3.7	-2.8	-34.8	N,M	19.3	Verified
				Head	DL, LL	273.5	-38.9	3.4	-2.8	-34.8	N,M	16.4	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	508.2	-43.7	-11.8	8.2	-34.3	N,M	23.6	Verified
				Base	DL, LL	592.3	37.1	-1.9	-1.5	-28.8	N,M	23.7	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL	573.9	-34.9	1.9	-1.5	-28.8	N,M	22.8	Verified
				Head	DL, LL, E	762.3	-52.2	-13.9	10.5	-40.2	N,M	32.1	Verified
				Base	DL, LL	890.3	37.9	-1.2	-1.1	-31.0	N,M	32.5	Verified
				Head	DL, LL	871.9	-39.6	1.6	-1.1	-31.0	N,M	32.1	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1035.4	54.5	15.9	11.8	-42.2	N,M	40.2	Verified
				Head	DL, LL, E	1016.6	-50.9	-13.9	12.0	-42.1	N,M	38.9	Verified
				Base	DL, LL	1187.7	42.5	0.5	0.1	-32.9	N,M	43.4	Verified
				Head	DL, LL	1169.3	-39.6	0.2	0.1	-32.9	N,M	42.7	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1286.4	49.1	5.7	3.3	-34.7	N,M	47.5	Verified
				Head	DL, LL, E	1265.8	-37.6	-7.7	11.8	-34.1	N,M	46.7	Verified
				Base	DL, LL	1482.1	21.3	1.1	0.7	-22.3	N,M	54.2	Verified
				Head	DL, LL, W	1208.2	-29.3	-1.4	1.9	-22.2	N,M	44.1	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1286.4	49.1	5.7	3.3	-34.7	N,M	47.5	Verified
				Base	DL, LL	1482.1	21.3	1.1	0.7	-22.3	N,M	54.2	Verified



Column, shear wall and wall forces and reinforcement

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Summary of code checks													
Columns	Floor	Span (m)	Dimension	Position	Worst case forces						Worst case	Use (%)	Status
					Nature	N (kN)	Mxx (kN·m)	Myy (kN·m)	Qx (kN)	Qy (kN)			
C28	techo	12.00/15.00	50x50	Base	DL, LL, E	269.0	47.3	-8.5	-6.6	-35.6	N,M	19.5	Verified
				Head	DL, LL, E	250.8	-43.4	-3.5	2.9	-36.8	N,M	17.3	Verified
				Base	DL, LL	291.2	48.6	5.1	3.9	-35.3	N,M	19.7	Verified
				Head	DL, LL	272.8	-39.6	-4.6	3.9	-35.3	N,M	16.7	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	498.2	-38.0	20.8	-14.7	-30.4	N,M	23.4	Verified
				Base	DL, LL	590.5	37.4	3.0	2.3	-29.0	N,M	23.8	Verified
				Head	DL, LL	572.1	-35.1	-2.8	2.3	-29.0	N,M	22.8	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	746.2	-45.6	23.3	-18.0	-35.4	N,M	31.5	Verified
				Head	DL, LL, E	746.2	-45.6	23.2	-18.0	-35.4	N,M	31.4	Verified
				Base	DL, LL	887.6	38.1	2.6	2.2	-31.2	N,M	32.4	Verified
				Head	DL, LL	869.2	-40.0	-3.0	2.2	-31.2	N,M	32.1	Verified
	Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1012.8	47.9	-27.3	-19.8	-36.5	N,M	39.6	Verified
				Head	DL, LL, E	994.3	-43.2	22.2	-19.8	-36.4	N,M	37.6	Verified
				Base	DL, LL	1183.7	42.1	1.2	1.1	-32.6	N,M	43.3	Verified
				Head	DL, LL	1165.3	-39.5	-1.6	1.1	-32.6	N,M	42.6	Verified
	Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1270.7	44.2	4.5	2.6	-31.8	N,M	46.9	Verified
				Head	DL, LL, E	1251.3	-35.6	-2.2	2.7	-32.1	N,M	46.2	Verified
				Base	DL, LL	1476.6	20.7	0.7	0.3	-21.9	N,M	54.0	Verified
				Head	DL, LL, W	1204.6	-28.7	0.5	-0.8	-21.6	N,M	44.0	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1270.7	44.2	4.5	2.6	-31.8	N,M	46.9	Verified
				Base	DL, LL	1476.6	20.7	0.7	0.3	-21.9	N,M	54.0	Verified
C29	techo	12.00/15.00	50x50	Base	DL, LL, E	262.4	41.0	-16.0	-13.2	-30.4	N,M	19.1	Verified
				Head	DL, LL, E	244.0	-34.9	16.9	-13.1	-30.3	N,M	17.2	Verified
				Base	DL, LL	279.6	36.6	-5.5	-5.2	-26.0	N,M	16.1	Verified
				Head	DL, LL	261.2	-28.3	7.6	-5.2	-26.0	N,M	13.7	Verified
	Floor 4	9.00/12.00	50x50	Head	DL, LL, E	489.2	-42.9	17.3	-13.2	-33.1	N,M	23.8	Verified
				Base	DL, LL	565.7	30.2	-0.7	0.1	-23.7	N,M	21.7	Verified
				Head	DL, LL	547.3	-29.1	-1.0	0.1	-23.7	N,M	20.9	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	738.7	-49.2	23.1	-17.7	-38.3	N,M	31.9	Verified
				Base	DL, LL	851.5	30.7	-2.0	-1.8	-25.0	N,M	31.1	Verified
				Head	DL, LL, W	704.9	-32.0	4.4	-3.3	-24.7	N,M	26.0	Verified
				Base	DL, LL, E	1009.1	53.8	-25.2	-18.5	-40.6	N,M	40.3	Verified
	Floor 2	3.00/6.00	50x50	Head	DL, LL, E	990.6	-47.7	21.1	-18.5	-40.6	N,M	38.2	Verified
				Base	DL, LL	1137.5	34.2	-2.6	-1.8	-26.6	N,M	41.6	Verified
				Head	DL, LL, W	940.0	-32.4	3.7	-3.4	-26.8	N,M	34.3	Verified
				Base	DL, LL, E	1256.2	43.9	-26.4	-15.5	-30.1	N,M	46.4	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL, E	1237.5	-31.4	12.2	-15.4	-30.1	N,M	45.7	Verified
				Base	DL, LL	1422.2	16.7	-1.1	-1.7	-17.8	N,M	52.0	Verified
				Head	DL, LL, W	1173.3	-25.1	3.7	-2.8	-19.9	N,M	42.9	Verified
				Base	DL, LL, E	1256.2	43.9	-26.4	-15.5	-30.1	N,M	46.4	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL	1422.2	16.7	-1.1	-1.7	-17.8	N,M	52.0	Verified
				Base	DL, LL	1422.2	16.7	-1.1	-1.7	-17.8	N,M	52.0	Verified
C30	techo	12.00/15.00	50x50	Base	DL, LL, E	139.4	28.5	75.5	57.4	-21.9	Q	51.7	Verified
				Base	DL, LL, E	133.4	13.6	81.2	63.7	-10.0	Q	56.7	Verified
				Base	DL, LL	143.7	18.1	91.1	67.9	-13.1	Q	69.1	Verified
	Floor 4	9.00/12.00	50x50	12.00 m	DL, LL, E	139.4	28.5	75.5	57.4	-21.9	N,M	31.3	Verified
				Head	DL, LL, E	235.3	11.4	-54.9	44.7	6.3	Q	28.7	Verified
				12.00 m	DL, LL	143.7	18.1	91.1	67.9	-13.1	N,M	34.3	Verified
				Base	DL, LL	308.7	14.5	67.9	51.4	-11.1	Q	31.5	Verified
	Floor 3	6.00/9.00	50x50	Head	DL, LL, E	432.3	-44.5	-51.0	40.0	-34.2	N,M	31.0	Verified
				Head	DL, LL, E	386.1	-7.6	-72.0	55.4	-5.8	N,M	28.4	Verified
				Head	DL, LL	455.3	-16.7	-74.8	58.4	-12.9	N,M	31.8	Verified
				Base	DL, LL, E	612.2	50.4	52.0	40.6	-37.1	N,M	35.3	Verified
	Floor 2	3.00/6.00	50x50	Head	DL, LL, E	522.3	-7.6	-66.7	57.6	-5.9	N,M	29.3	Verified
				Base	DL, LL	640.0	18.8	80.1	61.0	-14.5	N,M	36.6	Verified
				Head	DL, LL	621.6	-17.4	-72.4	61.0	-14.5	N,M	34.0	Verified
				3.00 m	DL, LL, E	612.2	50.4	52.0	40.6	-37.1	N,M	35.3	Verified
	Floor 1	0.00/3.00	50x50	Head	DL, LL, E	596.0	-3.0	-52.3	44.7	9.2	N,M	27.0	Verified
				3.00 m	DL, LL	640.0	18.8	80.1	61.0	-14.5	N,M	36.6	Verified
				Head	DL, LL	787.3	-16.4	-66.3	42.2	-10.5	N,M	36.1	Verified
				Base	DL, LL, E	612.8	-26.6	59.4	44.6	9.5	N,M	31.8	Verified
	Foundations	-0.17/0.00	50x50	Base	DL, LL	805.7	9.7	39.3	42.2	-10.5	N,M	30.5	Verified
				Base	DL, LL	805.7	9.7	39.3	42.2	-10.5	N,M	30.5	Verified

Notes:
N,M: Limit state at failure under normal stresses
Q: Ultimate shear resistance



5.2.- Walls

References:

Usage: Stress level (ratio of the maximum stress and the allowable). Equivalent to the inverse of the safety factor.

Nx : Vertical axial force.

Ny : Horizontal axial force.

Nxy: Tangential axial force.

Mx : Vertical moment (about the horizontal axis).

My : Horizontal moment (about the vertical axis).

Mxy: Torsional Moment.

Qx : Transverse vertical shear.

Qy : Transverse horizontal shear.

Wall W1: Length: 136.918 cm [Initial node: 13.97;10.00 -> Final node: 15.34;10.00]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	157.74	3.41	-4.96	38.82	56.76	7.85	2.23	---	---
	Horz. rgt. reinf.	70.27	-177.58	41.14	59.14	43.17	8.97	-0.76	---	---
	Vert. lft. reinf.	143.66	53.43	-93.93	5.89	-49.92	-6.72	0.50	---	---
	Horz. lft. reinf.	44.92	-13.83	-197.60	143.72	-35.32	-12.05	-1.03	---	---
	Concrete	20.40	-116.50	-341.19	156.12	-41.78	-14.12	-1.99	---	---
	Transve. reinf.	4.77	-154.43	42.81	51.04	---	---	---	-48.14	12.35
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	176.57	-92.22	-18.26	37.20	58.48	8.15	2.08	---	---
	Horz. rgt. reinf.	66.93	-229.61	40.90	58.50	48.65	8.03	-1.40	---	---
	Vert. lft. reinf.	110.14	-71.40	-285.25	124.94	-45.97	-15.16	-4.09	---	---
	Horz. lft. reinf.	66.32	141.19	10.22	2.37	-19.83	-13.31	-4.05	---	---
	Concrete	23.83	-718.76	-859.55	381.53	-23.70	-9.77	8.43	---	---
	Transve. reinf.	4.96	-229.61	40.90	58.50	---	---	---	-49.81	14.11
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	135.63	7.26	-3.20	43.23	48.00	6.97	1.09	---	---
	Horz. rgt. reinf.	67.46	-262.34	39.96	60.87	53.00	8.76	-1.48	---	---
	Vert. lft. reinf.	126.59	0.08	-173.10	78.14	-41.24	-13.55	-3.39	---	---
	Horz. lft. reinf.	100.52	93.70	73.70	8.98	-21.55	-14.82	-4.56	---	---
	Concrete	25.77	-637.37	-2.61	28.83	35.75	7.79	-0.29	---	---
	Transve. reinf.	5.87	-668.93	-262.02	82.80	---	---	---	40.30	46.03
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	98.07	87.67	8.30	44.16	51.26	7.26	2.13	---	---
	Horz. rgt. reinf.	65.90	-247.15	33.29	61.60	53.09	9.53	-0.92	---	---
	Vert. lft. reinf.	119.24	36.12	-54.94	19.62	-44.43	-6.22	-4.07	---	---
	Horz. lft. reinf.	112.61	-52.44	116.61	0.77	-21.56	-15.33	-4.71	---	---
	Concrete	33.97	-1096.67	-124.15	6.06	21.93	-0.69	3.61	---	---
	Transve. reinf.	7.23	-1037.14	-241.68	66.99	---	---	---	53.73	53.05
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	131.61	584.90	50.98	21.00	7.46	2.07	0.47	---	---
	Horz. rgt. reinf.	45.53	584.90	50.98	21.00	7.46	2.07	0.47	---	---
	Vert. lft. reinf.	117.17	584.90	50.98	21.00	0.00	2.07	0.47	---	---
	Horz. lft. reinf.	123.80	-701.45	128.69	246.27	-14.03	-7.41	3.39	---	---
	Concrete	42.82	-865.06	34.50	322.47	17.30	-9.42	4.64	---	---
	Transve. reinf.	7.02	-1360.24	-219.93	26.88	---	---	---	50.65	52.39



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Wall W2: Length: 138.079 cm [Initial node: 13.97;20.00 -> Final node: 15.35;20.00]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	141.63	40.42	-76.85	-16.89	36.89	3.84	0.89	---	---
	Horz. rgt. reinf.	43.63	-28.35	-155.30	118.84	26.69	9.54	1.57	---	---
	Vert. lft. reinf.	156.68	-35.03	3.54	14.13	-27.44	-3.82	-3.12	---	---
	Horz. lft. reinf.	44.31	-39.23	3.53	15.77	-27.43	-3.83	-3.10	---	---
	Concrete	21.70	-307.95	-31.63	-8.23	-59.83	-6.91	1.10	---	---
	Transve. reinf.	3.70	-256.51	-316.88	85.17	---	---	---	-20.41	-32.91
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	249.18	188.60	-70.02	-5.38	50.48	5.59	3.97	---	---
	Horz. rgt. reinf.	143.01	172.41	192.26	53.56	10.09	7.96	3.82	---	---
	Vert. lft. reinf.	159.44	-266.18	-27.56	-9.00	-56.78	-6.59	0.68	---	---
	Horz. lft. reinf.	48.19	-62.07	4.03	26.35	-26.69	-3.61	-3.09	---	---
	Concrete	24.42	-365.77	-38.18	-10.39	-65.18	-7.55	0.98	---	---
	Transve. reinf.	5.67	-5.72	-148.55	-33.62	---	---	---	10.60	58.37
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	336.18	273.25	-30.02	-5.51	58.71	6.80	4.32	---	---
	Horz. rgt. reinf.	195.92	130.57	319.23	56.94	10.13	8.57	4.01	---	---
	Vert. lft. reinf.	112.18	119.68	24.24	33.07	-25.33	-3.36	-2.95	---	---
	Horz. lft. reinf.	112.32	130.57	319.23	56.94	0.00	8.57	4.01	---	---
	Concrete	27.01	-384.16	-40.22	-11.06	-72.86	-8.44	1.05	---	---
	Transve. reinf.	6.77	-18.83	-111.05	-14.99	---	---	---	14.28	69.12
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	265.35	305.73	-12.58	-4.82	66.00	7.70	4.94	---	---
	Horz. rgt. reinf.	209.54	-8.43	393.36	26.20	9.59	8.85	3.95	---	---
	Vert. lft. reinf.	102.83	308.73	46.27	43.91	-29.10	-3.90	-3.12	---	---
	Horz. lft. reinf.	136.59	-8.43	393.36	26.20	-0.17	8.85	3.95	---	---
	Concrete	36.81	-901.32	-96.14	-29.78	-57.38	-7.37	-3.57	---	---
	Transve. reinf.	7.57	-43.91	-76.77	6.82	---	---	---	16.51	76.89
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	92.42	300.49	-31.75	16.73	41.72	4.65	3.40	---	---
	Horz. rgt. reinf.	182.89	-391.98	358.42	-85.86	7.84	7.42	3.14	---	---
	Vert. lft. reinf.	85.98	597.44	70.27	25.50	-3.93	-0.56	-0.25	---	---
	Horz. lft. reinf.	145.96	-391.98	358.42	-85.86	-7.84	7.42	3.14	---	---
	Concrete	36.12	-1217.75	-166.36	7.71	24.35	-2.47	-1.17	---	---
	Transve. reinf.	5.90	-1081.72	-252.31	-151.53	---	---	---	-21.60	-57.24

Wall W3: Length: 99.9 cm [Initial node: 14.13;11.17 -> Final node: 14.13;12.17]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	286.31	351.37	116.85	-70.04	1.50	0.35	-0.11	---	---
	Horz. rgt. reinf.	98.61	337.09	120.26	-70.09	1.30	0.27	-0.08	---	---
	Vert. lft. reinf.	276.50	351.37	116.85	-70.04	0.00	0.35	-0.11	---	---
	Horz. lft. reinf.	96.81	319.70	122.99	-70.11	0.00	0.09	-0.02	---	---
	Concrete	15.11	-531.15	-618.72	-252.58	10.62	1.27	0.80	---	---
	Transve. reinf.	0.48	-33.55	-53.86	-5.50	---	---	---	4.29	-2.59
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	197.81	395.13	248.09	-89.98	0.19	-1.75	0.63	---	---
	Horz. rgt. reinf.	140.15	395.13	248.09	-89.98	0.19	-1.75	0.63	---	---
	Vert. lft. reinf.	202.20	395.13	248.09	-89.98	0.00	-1.75	0.63	---	---
	Horz. lft. reinf.	155.44	395.13	248.09	-89.98	0.00	-1.75	0.63	---	---
	Concrete	10.59	-463.93	-391.85	-104.35	-9.28	3.81	1.43	---	---
	Transve. reinf.	0.21	-75.83	-16.97	-110.48	---	---	---	1.30	1.80
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	216.74	501.92	366.55	-130.18	0.00	-3.04	1.13	---	---



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Wall W3: Length: 99.9 cm [Initial node: 14.13;11.17 -> Final node: 14.13;12.17]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. rgt. reinf.	197.10	501.92	366.55	-130.18	0.00	-3.04	1.13	---	---
	Vert. lft. reinf.	222.23	501.92	366.55	-130.18	-1.06	-3.04	1.13	---	---
	Horz. lft. reinf.	161.06	501.92	366.55	-130.18	-1.06	-3.04	1.13	---	---
	Concrete	21.60	4.11	-4.96	188.38	2.87	0.02	1.42	---	---
	Transve. reinf.	0.24	-69.75	-3.56	-146.75	---	---	---	1.15	2.23
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	140.27	540.89	470.32	-160.75	0.00	-4.13	1.50	---	---
	Horz. rgt. reinf.	198.28	540.89	470.32	-160.75	0.00	-4.13	1.50	---	---
	Vert. lft. reinf.	143.87	540.89	470.32	-160.75	-2.02	-4.13	1.50	---	---
	Horz. lft. reinf.	134.60	540.89	470.32	-160.75	-2.02	-4.13	1.50	---	---
	Concrete	25.70	-12.23	1.05	222.64	1.94	-0.10	1.69	---	---
	Transve. reinf.	0.27	-432.71	-69.87	149.56	---	---	---	0.14	-2.78
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	152.48	1126.48	91.83	-52.48	0.00	-0.37	0.04	---	---
	Horz. rgt. reinf.	160.96	278.63	473.33	-155.75	0.00	-3.20	1.34	---	---
	Vert. lft. reinf.	153.91	1126.48	91.83	-52.48	-1.65	-0.37	0.04	---	---
	Horz. lft. reinf.	107.62	313.39	471.76	-158.83	-2.41	-4.14	1.48	---	---
	Concrete	33.15	-1339.03	-129.52	59.82	-26.78	0.40	-0.02	---	---
	Transve. reinf.	0.47	-304.06	7.31	-86.57	---	---	---	-4.78	-0.14

Wall W7: Length: 99.9 cm [Initial node: 14.93;11.17 -> Final node: 14.93;12.17]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	302.74	374.91	137.37	-80.70	0.45	0.45	-0.17	---	---
	Horz. rgt. reinf.	114.24	343.71	142.42	-80.30	0.92	0.66	-0.26	---	---
	Vert. lft. reinf.	298.40	374.91	137.37	-80.70	0.00	0.45	-0.17	---	---
	Horz. lft. reinf.	108.91	360.32	140.40	-80.57	0.00	0.46	-0.17	---	---
	Concrete	14.97	-534.29	-618.63	-250.49	-10.69	-0.81	-0.20	---	---
	Transve. reinf.	0.54	-40.10	-56.54	4.81	---	---	---	-4.40	3.51
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	200.59	402.46	259.22	-88.58	2.05	2.83	-0.99	---	---
	Horz. rgt. reinf.	163.33	402.46	259.22	-88.58	2.05	2.83	-0.99	---	---
	Vert. lft. reinf.	186.54	402.46	259.22	-88.58	0.00	2.83	-0.99	---	---
	Horz. lft. reinf.	138.33	402.46	259.22	-88.58	0.00	2.83	-0.99	---	---
	Concrete	10.75	-472.05	-405.23	-112.97	9.44	-3.17	-1.07	---	---
	Transve. reinf.	0.24	-63.39	-18.40	-119.67	---	---	---	0.02	-2.53
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	191.76	501.54	369.94	-124.61	3.15	3.93	-1.38	---	---
	Horz. rgt. reinf.	160.51	501.04	370.62	-124.65	3.15	3.94	-1.38	---	---
	Vert. lft. reinf.	180.36	501.54	369.94	-124.61	0.00	3.93	-1.38	---	---
	Horz. lft. reinf.	189.40	501.04	370.62	-124.65	0.00	3.94	-1.38	---	---
	Concrete	23.14	-10.19	-8.73	202.60	1.37	0.19	-1.35	---	---
	Transve. reinf.	0.30	-64.22	-7.42	-156.48	---	---	---	0.31	-3.10
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	142.85	530.30	463.10	-149.81	3.72	4.74	-1.63	---	---
	Horz. rgt. reinf.	132.30	530.30	463.10	-149.81	3.72	4.74	-1.63	---	---
	Vert. lft. reinf.	135.42	530.30	463.10	-149.81	0.00	4.74	-1.63	---	---
	Horz. lft. reinf.	190.38	530.30	463.10	-149.81	0.00	4.74	-1.63	---	---
	Concrete	26.30	21.02	-1.19	228.97	1.47	0.16	-1.61	---	---
	Transve. reinf.	0.34	-13.78	10.74	-183.12	---	---	---	0.54	-3.47
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	149.86	1096.11	87.57	-51.51	1.21	0.28	0.04	---	---
	Horz. rgt. reinf.	180.51	307.17	466.36	-147.01	3.10	4.44	-1.47	---	---
	Vert. lft. reinf.	150.02	1096.43	86.89	-52.26	-1.11	-0.23	0.15	---	---



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Wall W7: Length: 99.9 cm [Initial node: 14.93;11.17 -> Final node: 14.93;12.17]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. lft. reinf.	154.50	307.17	466.36	-147.01	0.00	4.44	-1.47	---	---
	Concrete	32.93	-1334.28	-128.13	60.71	-26.69	0.24	-0.16	---	---
	Transve. reinf.	0.47	-183.66	4.40	-57.26	---	---	---	-4.89	0.17

Wall W8: Length: 99.7 cm [Initial node: 14.93;13.20 -> Final node: 14.93;14.20]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	199.40	408.67	249.88	-110.36	5.40	3.09	-1.13	---	---
	Horz. rgt. reinf.	169.77	408.67	249.88	-110.36	5.40	3.09	-1.13	---	---
	Vert. lft. reinf.	117.23	380.72	204.85	133.94	-5.90	0.06	-1.78	---	---
	Horz. lft. reinf.	149.21	383.90	258.07	-110.23	-1.04	-0.07	0.09	---	---
	Concrete	12.92	380.72	204.85	133.94	0.00	0.06	-1.78	---	---
	Transve. reinf.	2.03	-1.97	-13.11	-4.18	---	---	---	-21.06	-0.67
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	215.06	484.72	546.74	218.50	0.00	4.66	-0.72	---	---
	Horz. rgt. reinf.	321.86	484.72	546.74	218.50	0.00	4.66	-0.72	---	---
	Vert. lft. reinf.	216.07	484.72	546.74	218.50	-3.41	4.66	-0.72	---	---
	Horz. lft. reinf.	214.75	484.72	546.74	218.50	-3.41	4.66	-0.72	---	---
	Concrete	19.37	484.72	546.74	218.50	0.00	4.66	-0.72	---	---
	Transve. reinf.	1.98	94.20	195.41	-43.04	---	---	---	14.62	14.46
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	187.30	601.52	797.47	290.18	0.00	6.00	-0.61	---	---
	Horz. rgt. reinf.	316.53	600.90	800.19	290.26	0.00	6.04	-0.61	---	---
	Vert. lft. reinf.	182.26	601.52	797.47	290.18	-3.48	6.00	-0.61	---	---
	Horz. lft. reinf.	172.99	600.90	800.19	290.26	-3.48	6.04	-0.61	---	---
	Concrete	25.49	600.90	800.19	290.26	-3.48	6.04	-0.61	---	---
	Transve. reinf.	2.49	37.38	305.58	-37.04	---	---	---	17.49	18.67
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	110.51	641.18	953.29	325.64	1.78	5.93	1.25	---	---
	Horz. rgt. reinf.	299.66	627.81	993.19	325.36	0.00	7.17	-0.16	---	---
	Vert. lft. reinf.	181.65	627.81	993.19	325.36	-2.62	7.17	-0.16	---	---
	Horz. lft. reinf.	283.79	627.81	993.19	325.36	-2.62	7.17	-0.16	---	---
	Concrete	30.53	641.18	953.29	325.64	0.00	5.93	1.25	---	---
	Transve. reinf.	117647.06	45.17	373.90	-29.00	---	---	---	11.04	17.01
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	102.94	946.12	63.28	48.04	0.66	0.23	-0.08	---	---
	Horz. rgt. reinf.	167.36	397.48	1002.79	260.10	0.00	7.22	0.77	---	---
	Vert. lft. reinf.	66.15	946.12	63.28	48.04	0.00	0.23	-0.08	---	---
	Horz. lft. reinf.	257.63	438.26	983.43	273.61	0.00	5.80	1.36	---	---
	Concrete	32.71	-1329.02	-118.11	-62.28	-26.58	-0.02	0.10	---	---
	Transve. reinf.	2.57	-296.29	-448.43	-48.92	---	---	---	-15.19	-21.32

Wall W9: Length: 99.9 cm [Initial node: 14.93;15.80 -> Final node: 14.93;16.80]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	182.70	414.65	396.95	184.07	0.27	1.25	0.19	---	---
	Horz. rgt. reinf.	241.31	414.65	396.95	184.07	0.27	1.25	0.19	---	---
	Vert. lft. reinf.	194.20	403.03	399.30	183.63	-5.01	-0.32	-1.69	---	---
	Horz. lft. reinf.	245.11	403.03	399.30	183.63	-5.01	-0.32	-1.69	---	---
	Concrete	17.17	403.03	399.30	183.63	0.00	-0.32	-1.69	---	---
	Transve. reinf.	2.14	-37.71	-10.43	-54.19	---	---	---	-21.48	-6.12
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	104.14	390.60	344.01	108.93	1.50	2.54	0.81	---	---
	Horz. rgt. reinf.	124.14	390.60	344.01	108.93	1.50	2.54	0.81	---	---



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Wall W9: Length: 99.9 cm [Initial node: 14.93;15.80 -> Final node: 14.93;16.80]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Vert. lft. reinf.	98.24	390.60	344.01	108.93	0.00	2.54	0.81	---	---
	Horz. lft. reinf.	110.79	390.60	344.01	108.93	0.00	2.54	0.81	---	---
	Concrete	14.74	-188.91	9.18	27.89	-41.24	-5.75	0.88	---	---
	Transve. reinf.	2.26	-153.32	-18.08	-51.24	---	---	---	-22.52	-6.82
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	60.86	412.21	302.23	-115.43	6.53	4.75	-2.01	---	---
	Horz. rgt. reinf.	102.29	425.36	440.39	128.46	2.25	3.42	1.11	---	---
	Vert. lft. reinf.	102.59	450.16	366.82	-135.60	-1.12	1.54	-0.38	---	---
	Horz. lft. reinf.	93.46	425.36	440.39	128.46	0.00	3.42	1.11	---	---
	Concrete	28.81	-197.29	-0.35	-259.44	3.95	0.29	0.60	---	---
	Transve. reinf.	2.61	-279.60	-26.36	-69.55	---	---	---	-26.07	-7.03
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	134.48	477.65	438.84	-157.35	6.30	5.18	-2.10	---	---
	Horz. rgt. reinf.	73.44	477.65	438.84	-157.35	6.30	5.18	-2.10	---	---
	Vert. lft. reinf.	120.34	460.00	474.15	-162.70	-0.26	2.33	-0.70	---	---
	Horz. lft. reinf.	102.13	460.00	474.15	-162.70	-0.26	2.33	-0.70	---	---
	Concrete	34.01	-219.14	-0.63	-306.71	4.38	0.23	0.73	---	---
	Transve. reinf.	2.59	-409.51	-31.63	-80.83	---	---	---	-25.75	-5.24
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	123.41	1029.82	73.76	-51.54	0.00	-0.77	0.22	---	---
	Horz. rgt. reinf.	82.77	269.98	464.35	-153.97	4.50	4.64	-1.78	---	---
	Vert. lft. reinf.	127.62	1029.82	73.76	-51.54	-3.17	-0.77	0.22	---	---
	Horz. lft. reinf.	112.91	223.12	486.39	-151.39	0.00	2.73	-0.93	---	---
	Concrete	31.96	-1288.95	-119.30	59.92	-25.78	0.98	-0.24	---	---
	Transve. reinf.	1.08	-563.74	13.42	-10.66	---	---	---	-10.96	-0.84

Wall W10: Length: 99.8 cm [Initial node: 14.93;17.84 -> Final node: 14.93;18.84]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	213.79	271.77	98.55	53.21	0.00	-0.20	-0.08	---	---
	Horz. rgt. reinf.	80.89	261.03	106.18	55.90	0.00	0.06	0.01	---	---
	Vert. lft. reinf.	219.60	271.77	98.55	53.21	-0.87	-0.20	-0.08	---	---
	Horz. lft. reinf.	80.54	261.03	106.18	55.90	-0.33	0.06	0.01	---	---
	Concrete	7.15	-311.67	-223.44	81.87	6.23	-0.93	0.32	---	---
	Transve. reinf.	0.77	-52.30	4.48	-36.87	---	---	---	-7.67	2.51
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	233.77	460.18	442.58	184.48	0.69	2.72	0.45	---	---
	Horz. rgt. reinf.	270.24	460.18	442.58	184.48	0.69	2.72	0.45	---	---
	Vert. lft. reinf.	135.36	460.18	442.58	184.48	0.00	2.72	0.45	---	---
	Horz. lft. reinf.	238.21	460.18	442.58	184.48	0.00	2.72	0.45	---	---
	Concrete	16.27	460.18	442.58	184.48	0.00	2.72	0.45	---	---
	Transve. reinf.	1.30	-166.33	-143.19	-24.63	---	---	---	-1.88	-13.42
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	257.51	576.34	668.02	253.16	1.81	4.14	0.92	---	---
	Horz. rgt. reinf.	329.00	576.34	668.02	253.16	1.81	4.14	0.92	---	---
	Vert. lft. reinf.	246.41	576.34	668.02	253.16	0.00	4.14	0.92	---	---
	Horz. lft. reinf.	301.96	576.34	668.02	253.16	0.00	4.14	0.92	---	---
	Concrete	22.63	576.34	668.02	253.16	0.00	4.14	0.92	---	---
	Transve. reinf.	1.56	-282.50	-144.22	-14.01	---	---	---	-3.03	-15.85
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	261.90	632.59	835.49	298.28	2.52	5.18	1.22	---	---
	Horz. rgt. reinf.	338.10	632.59	835.49	298.28	2.52	5.18	1.22	---	---
	Vert. lft. reinf.	248.86	632.59	835.49	298.28	0.00	5.18	1.22	---	---
	Horz. lft. reinf.	309.36	632.59	835.49	298.28	0.00	5.18	1.22	---	---



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Wall W10: Length: 99.8 cm [Initial node: 14.93;17.84 -> Final node: 14.93;18.84]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Concrete	26.77	632.59	835.49	298.28	0.00	5.18	1.22	---	---
	Transve. reinf.	1.58	-386.64	-167.25	-7.27	---	---	---	-3.52	-16.07
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	140.47	1035.85	81.03	49.26	0.65	0.18	-0.06	---	---
	Horz. rgt. reinf.	184.14	445.83	850.88	264.16	2.35	5.01	1.20	---	---
	Vert. lft. reinf.	140.37	1035.85	81.03	49.26	0.00	0.18	-0.06	---	---
	Horz. lft. reinf.	288.89	445.83	850.88	264.16	0.00	5.01	1.20	---	---
	Concrete	35.59	-1439.32	-139.13	-64.43	-28.79	0.08	0.09	---	---
	Transve. reinf.	1.58	-583.50	-380.62	-76.84	---	---	---	-5.45	-15.30
Wall W4: Length: 99.5 cm [Initial node: 14.13;13.21 -> Final node: 14.13;14.20]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	229.40	479.32	495.60	-224.91	4.42	0.78	-1.65	---	---
	Horz. rgt. reinf.	301.47	479.32	495.60	-224.91	4.42	0.78	-1.65	---	---
	Vert. lft. reinf.	210.03	479.32	495.60	-224.91	0.00	0.78	-1.65	---	---
	Horz. lft. reinf.	284.71	479.32	495.60	-224.91	0.00	0.78	-1.65	---	---
	Concrete	20.75	479.32	495.60	-224.91	0.00	0.78	-1.65	---	---
	Transve. reinf.	0.81	46.76	12.39	-92.80	---	---	---	7.84	-3.14
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	237.51	455.27	478.95	193.65	1.74	-2.69	0.21	---	---
	Horz. rgt. reinf.	270.66	455.27	478.95	193.65	1.74	-2.69	0.21	---	---
	Vert. lft. reinf.	232.99	455.27	478.95	193.65	0.00	-2.69	0.21	---	---
	Horz. lft. reinf.	285.11	455.27	478.95	193.65	0.00	-2.69	0.21	---	---
	Concrete	19.16	-31.98	-8.86	167.63	3.95	0.39	1.19	---	---
	Transve. reinf.	1.39	-242.95	-178.37	48.98	---	---	---	3.84	13.99
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	255.51	591.67	722.17	271.55	0.56	-4.17	-0.37	---	---
	Horz. rgt. reinf.	277.69	591.24	723.86	271.60	0.55	-4.19	-0.38	---	---
	Vert. lft. reinf.	257.94	591.67	722.17	271.55	0.00	-4.17	-0.37	---	---
	Horz. lft. reinf.	297.43	591.24	723.86	271.60	0.00	-4.19	-0.38	---	---
	Concrete	23.84	-25.28	-19.67	207.29	3.32	0.33	1.62	---	---
	Transve. reinf.	1.77	-348.70	-276.86	45.37	---	---	---	5.77	17.42
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	231.54	644.35	917.41	318.04	0.00	-5.34	-0.81	---	---
	Horz. rgt. reinf.	303.91	644.35	917.41	318.04	0.00	-5.34	-0.81	---	---
	Vert. lft. reinf.	237.32	644.35	917.41	318.04	-0.32	-5.34	-0.81	---	---
	Horz. lft. reinf.	327.83	644.35	917.41	318.04	-0.32	-5.34	-0.81	---	---
	Concrete	28.23	644.35	917.41	318.04	0.00	-5.34	-0.81	---	---
	Transve. reinf.	2.04	-409.10	-364.01	33.02	---	---	---	7.26	20.04
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	106.90	984.65	68.23	49.48	0.00	-0.43	-0.01	---	---
	Horz. rgt. reinf.	252.97	441.38	944.42	272.13	0.00	-5.65	-1.20	---	---
	Vert. lft. reinf.	108.52	984.65	68.23	49.48	-1.62	-0.43	-0.01	---	---
	Horz. lft. reinf.	277.15	441.38	944.42	272.13	-1.36	-5.65	-1.20	---	---
	Concrete	32.85	-1340.18	-118.37	-62.97	26.80	-0.13	-0.04	---	---
	Transve. reinf.	1.78	-369.13	-405.09	-45.15	---	---	---	6.76	17.01



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Wall W5: Length: 99.5 cm [Initial node: 14.13;15.80 -> Final node: 14.13;16.80]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	219.97	413.87	410.59	181.46	2.02	-0.34	0.58	---	---
	Horz. rgt. reinf.	246.68	413.87	410.59	181.46	2.02	-0.34	0.58	---	---
	Vert. lft. reinf.	211.05	413.87	410.59	181.46	0.00	-0.34	0.58	---	---
	Horz. lft. reinf.	244.14	413.87	410.59	181.46	0.00	-0.34	0.58	---	---
	Concrete	16.10	413.87	410.59	181.46	0.00	-0.34	0.58	---	---
	Transve. reinf.	1.23	5.06	37.22	-104.64	---	---	---	12.45	-3.10
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	232.62	524.25	727.45	246.93	0.89	-2.74	-0.02	---	---
	Horz. rgt. reinf.	273.84	524.25	727.45	246.93	0.89	-2.74	-0.02	---	---
	Vert. lft. reinf.	139.26	515.49	737.15	242.91	-0.82	-3.93	-0.76	---	---
	Horz. lft. reinf.	280.95	515.49	737.15	242.91	-0.82	-3.93	-0.76	---	---
	Concrete	22.27	515.49	737.15	242.91	0.00	-3.93	-0.76	---	---
	Transve. reinf.	2.30	-296.64	-327.69	19.84	---	---	---	4.64	23.28
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	212.59	601.02	926.58	286.24	0.00	-4.38	-0.56	---	---
	Horz. rgt. reinf.	269.66	599.74	931.69	286.23	0.00	-4.42	-0.57	---	---
	Vert. lft. reinf.	131.50	589.16	932.03	280.73	-2.70	-5.92	-1.67	---	---
	Horz. lft. reinf.	282.08	589.24	933.10	280.87	-2.66	-5.91	-1.65	---	---
	Concrete	26.41	589.24	933.10	280.87	0.00	-5.91	-1.65	---	---
	Transve. reinf.	117647.06	37.46	359.46	-37.35	---	---	---	-7.20	-14.41
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	120.60	553.51	1049.98	276.05	0.00	-5.44	-0.91	---	---
	Horz. rgt. reinf.	281.69	553.51	1049.98	276.05	0.00	-5.44	-0.91	---	---
	Vert. lft. reinf.	125.55	537.19	1049.36	268.51	-2.90	-6.86	-1.83	---	---
	Horz. lft. reinf.	306.72	537.19	1049.36	268.51	-2.90	-6.86	-1.83	---	---
	Concrete	25.82	537.19	1049.36	268.51	0.00	-6.86	-1.83	---	---
	Transve. reinf.	117647.06	-104.05	389.82	-44.82	---	---	---	-8.40	-17.35
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	124.82	1036.63	75.92	-50.20	0.00	-0.85	0.10	---	---
	Horz. rgt. reinf.	269.27	234.35	977.17	164.56	0.00	-5.44	-1.07	---	---
	Vert. lft. reinf.	72.95	1036.63	75.92	-50.20	-3.76	-0.85	0.10	---	---
	Horz. lft. reinf.	291.95	234.35	977.17	164.56	-1.15	-5.44	-1.07	---	---
	Concrete	31.11	-1275.97	-117.69	58.30	-25.52	0.18	-0.03	---	---
	Transve. reinf.	2.33	-151.75	-386.94	-8.85	---	---	---	7.03	23.36

Wall W6: Length: 100.2 cm [Initial node: 14.13;17.84 -> Final node: 14.13;18.84]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	235.13	285.83	113.44	58.99	1.37	0.17	-0.01	---	---
	Horz. rgt. reinf.	88.83	279.38	121.53	62.75	0.27	-0.37	-0.22	---	---
	Vert. lft. reinf.	227.21	285.83	113.44	58.99	0.00	0.17	-0.01	---	---
	Horz. lft. reinf.	92.80	279.38	121.53	62.75	0.00	-0.37	-0.22	---	---
	Concrete	7.60	-331.29	-222.40	87.82	-6.63	1.36	-0.51	---	---
	Transve. reinf.	0.83	-63.76	0.37	-19.51	---	---	---	8.50	-1.58
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	143.77	490.06	470.45	195.14	0.00	-2.63	-0.53	---	---
	Horz. rgt. reinf.	254.67	480.03	469.56	186.94	1.02	-1.71	-0.01	---	---
	Vert. lft. reinf.	247.72	490.06	470.45	195.14	-0.45	-2.63	-0.53	---	---
	Horz. lft. reinf.	286.33	489.64	471.12	195.16	-0.43	-2.61	-0.52	---	---
	Concrete	17.25	490.06	470.45	195.14	0.00	-2.63	-0.53	---	---
	Transve. reinf.	1.47	-300.96	-244.46	-13.93	---	---	---	4.55	14.56
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	218.72	599.05	703.56	258.58	0.00	-4.54	-1.19	---	---
	Horz. rgt. reinf.	183.93	598.34	703.72	258.44	0.00	-4.52	-1.18	---	---
	Vert. lft. reinf.	243.13	599.05	703.56	258.58	-1.94	-4.54	-1.19	---	---



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Wall W6: Length: 100.2 cm [Initial node: 14.13;17.84 -> Final node: 14.13;18.84]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. lft. reinf.	342.01	599.05	703.56	258.58	-1.94	-4.54	-1.19	---	---
	Concrete	23.42	599.05	703.56	258.58	0.00	-4.54	-1.19	---	---
	Transve. reinf.	1.88	-446.98	-321.12	4.40	---	---	---	6.45	18.29
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	224.27	638.30	851.74	298.43	0.00	-4.16	-0.76	---	---
	Horz. rgt. reinf.	285.34	638.30	851.74	298.43	0.00	-4.16	-0.76	---	---
	Vert. lft. reinf.	233.63	635.70	866.86	294.13	-2.45	-5.60	-1.44	---	---
	Horz. lft. reinf.	311.66	635.70	866.86	294.13	-2.45	-5.60	-1.44	---	---
	Concrete	26.58	635.70	866.86	294.13	0.00	-5.60	-1.44	---	---
	Transve. reinf.	117647.06	34.40	321.28	-65.02	---	---	---	-6.86	-12.88
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	122.24	1013.79	102.43	47.44	0.00	-0.13	0.02	---	---
	Horz. rgt. reinf.	264.97	442.19	866.65	258.94	0.00	-4.33	-0.96	---	---
	Vert. lft. reinf.	122.94	1013.79	102.43	47.44	-0.71	-0.13	0.02	---	---
	Horz. lft. reinf.	286.80	420.83	873.67	247.59	-1.98	-5.23	-1.15	---	---
	Concrete	33.74	-1407.06	-157.14	-60.76	28.14	-0.14	-0.07	---	---
	Transve. reinf.	1.91	-541.45	-387.29	-48.25	---	---	---	7.21	18.60

Wall W39: Length: 99.9 cm [Initial node: 16.48;14.02 -> Final node: 17.48;14.02]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	164.70	324.07	290.90	93.47	0.15	-0.36	-0.05	---	---
	Horz. rgt. reinf.	160.94	324.07	290.90	93.47	0.15	-0.36	-0.05	---	---
	Vert. lft. reinf.	164.73	324.07	290.90	93.47	0.00	-0.36	-0.05	---	---
	Horz. lft. reinf.	163.43	324.07	290.90	93.47	0.00	-0.36	-0.05	---	---
	Concrete	9.39	-412.50	-300.22	126.05	-8.25	0.46	-0.30	---	---
	Transve. reinf.	1.35	-52.33	32.96	-46.25	---	---	---	-8.34	-11.34
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	235.45	398.75	508.00	169.19	1.32	0.43	0.43	---	---
	Horz. rgt. reinf.	283.05	378.77	520.21	160.98	1.35	0.29	0.44	---	---
	Vert. lft. reinf.	382.48	398.75	508.00	169.19	0.00	0.43	0.43	---	---
	Horz. lft. reinf.	291.44	378.77	520.21	160.98	0.00	0.29	0.44	---	---
	Concrete	14.96	398.75	508.00	169.19	0.00	0.43	0.43	---	---
	Transve. reinf.	1.45	-136.39	19.41	7.84	---	---	---	-14.94	2.48
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	221.50	405.59	614.72	179.71	1.18	0.38	0.38	---	---
	Horz. rgt. reinf.	326.34	402.08	617.38	178.95	1.20	0.38	0.39	---	---
	Vert. lft. reinf.	215.59	405.59	614.72	179.71	0.00	0.38	0.38	---	---
	Horz. lft. reinf.	321.12	402.08	617.38	178.95	0.00	0.38	0.39	---	---
	Concrete	16.00	405.59	614.72	179.71	0.00	0.38	0.38	---	---
	Transve. reinf.	1.72	-161.20	127.40	-7.08	---	---	---	-17.29	4.72
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	124.71	295.92	672.22	150.53	1.04	0.33	0.34	---	---
	Horz. rgt. reinf.	327.75	295.92	672.22	150.53	1.04	0.33	0.34	---	---
	Vert. lft. reinf.	120.99	295.92	672.22	150.53	0.00	0.33	0.34	---	---
	Horz. lft. reinf.	323.56	295.92	672.22	150.53	0.00	0.33	0.34	---	---
	Concrete	22.01	-898.64	-123.36	67.19	17.97	-0.09	0.09	---	---
	Transve. reinf.	1.89	-305.51	20.46	16.19	---	---	---	-19.29	4.10
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	128.79	713.81	50.50	-31.48	0.12	0.03	0.01	---	---
	Horz. rgt. reinf.	249.37	-62.62	578.67	35.49	1.25	0.13	0.27	---	---
	Vert. lft. reinf.	128.63	713.81	50.50	-31.48	0.00	0.03	0.01	---	---
	Horz. lft. reinf.	247.66	-62.62	578.67	35.49	-1.25	0.13	0.27	---	---
	Concrete	28.42	-1147.42	-117.52	47.86	22.95	-0.01	-0.01	---	---



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Wall W39: Length: 99.9 cm [Initial node: 16.48;14.02 -> Final node: 17.48;14.02]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Transve. reinf.	1.65	-475.00	94.43	12.50	---	---	---	-16.64	4.31

Wall W41: Length: 128.182 cm [Initial node: 19.00;16.50 -> Final node: 20.28;16.50]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	164.50	407.70	145.91	71.13	0.37	0.26	0.09	---	---
	Horz. rgt. reinf.	102.58	363.08	154.63	73.75	0.53	0.13	0.07	---	---
	Vert. lft. reinf.	162.82	407.71	145.92	71.14	0.00	0.26	0.09	---	---
	Horz. lft. reinf.	101.16	363.08	154.63	73.75	0.00	0.13	0.07	---	---
	Concrete	19.23	-645.42	-888.44	292.79	-12.91	-1.24	0.70	---	---
	Transve. reinf.	1.41	31.51	-236.21	-81.81	---	---	---	5.70	13.52
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	248.58	275.23	284.85	86.08	1.08	-0.21	-0.15	---	---
	Horz. rgt. reinf.	162.94	274.64	285.79	86.27	1.08	-0.22	-0.15	---	---
	Vert. lft. reinf.	244.26	275.23	284.85	86.08	0.00	-0.21	-0.15	---	---
	Horz. lft. reinf.	165.05	274.64	285.79	86.27	0.00	-0.22	-0.15	---	---
	Concrete	14.26	-303.42	-20.61	-29.48	25.47	3.32	2.44	---	---
	Transve. reinf.	1.31	-304.58	15.83	-22.53	---	---	---	-11.88	-6.95
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	293.07	308.08	376.65	117.46	1.13	-0.47	-0.24	---	---
	Horz. rgt. reinf.	213.94	304.52	378.97	117.66	1.15	-0.47	-0.24	---	---
	Vert. lft. reinf.	289.70	308.08	376.65	117.46	0.00	-0.47	-0.24	---	---
	Horz. lft. reinf.	218.22	304.52	378.97	117.66	0.00	-0.47	-0.24	---	---
	Concrete	16.42	-329.92	-23.24	-37.79	31.75	4.16	2.86	---	---
	Transve. reinf.	1.68	-384.83	13.69	-36.58	---	---	---	-15.51	-8.33
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	132.60	212.90	437.62	126.74	1.08	-0.59	-0.24	---	---
	Horz. rgt. reinf.	224.50	212.90	437.62	126.74	1.08	-0.59	-0.24	---	---
	Vert. lft. reinf.	131.63	212.90	437.62	126.74	0.00	-0.59	-0.24	---	---
	Horz. lft. reinf.	229.36	212.90	437.62	126.74	0.00	-0.59	-0.24	---	---
	Concrete	22.15	-636.52	10.79	-114.51	12.73	1.36	0.07	---	---
	Transve. reinf.	1.89	-429.08	9.92	-59.54	---	---	---	-17.96	-7.98
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	157.80	778.09	69.33	35.20	0.00	-0.15	0.01	---	---
	Horz. rgt. reinf.	176.15	-111.42	379.21	90.38	2.23	-0.54	-0.10	---	---
	Vert. lft. reinf.	158.34	778.09	69.33	35.20	-0.30	-0.15	0.01	---	---
	Horz. lft. reinf.	180.18	-111.42	379.21	90.38	-2.23	-0.54	-0.10	---	---
	Concrete	31.29	-1267.02	-152.23	-50.75	-25.34	0.52	0.02	---	---
	Transve. reinf.	1.07	-466.09	5.61	-68.91	---	---	---	-10.95	-1.97

Wall W42: Length: 128.2 cm [Initial node: 19.00;14.02 -> Final node: 20.28;14.02]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	177.86	403.14	141.77	69.46	0.00	-0.95	-0.69	---	---
	Horz. rgt. reinf.	94.58	356.65	148.55	71.19	0.00	-0.86	-0.67	---	---
	Vert. lft. reinf.	127.21	403.14	141.77	69.46	-3.79	-0.95	-0.69	---	---
	Horz. lft. reinf.	100.00	356.65	148.55	71.19	-3.86	-0.86	-0.67	---	---
	Concrete	19.29	-667.29	-884.55	293.18	-13.35	-0.69	0.54	---	---
	Transve. reinf.	1.29	41.79	-194.26	-95.28	---	---	---	-4.99	-12.54
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	237.12	266.36	279.55	84.48	0.00	0.06	0.12	---	---
	Horz. rgt. reinf.	161.26	265.97	280.47	84.69	0.00	0.06	0.12	---	---



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Wall W42: Length: 128.2 cm [Initial node: 19.00;14.02 -> Final node: 20.28;14.02]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Vert. lft. reinf.	247.82	252.20	274.05	81.74	-4.07	-0.53	0.06	---	---
	Horz. lft. reinf.	160.59	265.97	280.47	84.69	-1.72	0.06	0.12	---	---
	Concrete	14.10	-264.78	-16.65	-15.75	-29.66	-3.91	-2.67	---	---
	Transve. reinf.	0.83	-224.01	2.93	70.37	---	---	---	7.80	3.74
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	289.00	308.39	371.09	117.33	0.00	0.16	0.16	---	---
	Horz. rgt. reinf.	214.62	305.15	372.97	117.45	0.00	0.17	0.16	---	---
	Vert. lft. reinf.	298.94	308.39	371.09	117.33	-2.14	0.16	0.16	---	---
	Horz. lft. reinf.	213.25	305.15	372.97	117.45	-2.16	0.17	0.16	---	---
	Concrete	17.28	-413.79	-33.42	7.37	26.52	3.50	2.18	---	---
	Transve. reinf.	1.39	-353.79	8.73	7.63	---	---	---	13.14	6.20
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	81.79	222.99	433.20	128.27	0.00	0.27	0.19	---	---
	Horz. rgt. reinf.	220.48	222.99	433.20	128.27	0.00	0.27	0.19	---	---
	Vert. lft. reinf.	139.48	222.99	433.20	128.27	-2.21	0.27	0.19	---	---
	Horz. lft. reinf.	225.23	222.99	433.20	128.27	-2.21	0.27	0.19	---	---
	Concrete	22.47	-647.99	10.01	-105.91	12.96	-1.44	0.18	---	---
	Transve. reinf.	1.69	-413.34	5.51	-1.56	---	---	---	16.41	6.33
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	163.80	790.81	71.54	35.90	1.88	0.57	0.04	---	---
	Horz. rgt. reinf.	181.65	-88.13	379.11	94.60	1.76	0.45	0.17	---	---
	Vert. lft. reinf.	160.32	790.81	71.54	35.90	0.00	0.57	0.04	---	---
	Horz. lft. reinf.	178.45	-106.43	381.28	91.72	-3.20	0.18	0.29	---	---
	Concrete	31.46	-1274.88	-154.29	-50.81	25.50	-0.54	-0.01	---	---
	Transve. reinf.	0.93	-857.56	6.77	-30.79	---	---	---	-9.62	-0.91

Wall W43: Length: 100.2 cm [Initial node: 20.00;17.30 -> Final node: 20.00;18.30]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	199.13	228.57	178.82	91.98	0.00	-0.80	-2.46	---	---
	Horz. rgt. reinf.	111.62	228.57	178.82	91.98	0.00	-0.80	-2.46	---	---
	Vert. lft. reinf.	275.58	229.64	164.72	87.08	-9.24	-1.24	-3.22	---	---
	Horz. lft. reinf.	140.02	228.57	178.82	91.98	-6.95	-0.80	-2.46	---	---
	Concrete	10.25	229.64	164.72	87.08	-9.24	-1.24	-3.22	---	---
	Transve. reinf.	0.99	-93.44	-29.77	47.19	---	---	---	-8.02	6.55
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	241.94	307.82	165.60	60.56	0.00	-1.29	-0.61	---	---
	Horz. rgt. reinf.	100.30	307.82	165.60	60.56	0.00	-1.29	-0.61	---	---
	Vert. lft. reinf.	269.90	307.82	165.60	60.56	-3.81	-1.29	-0.61	---	---
	Horz. lft. reinf.	114.76	307.82	165.60	60.56	-3.81	-1.29	-0.61	---	---
	Concrete	12.91	-562.61	-354.18	143.57	11.25	-1.92	0.71	---	---
	Transve. reinf.	0.30	-153.99	-32.14	48.41	---	---	---	-2.73	1.63
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	271.49	327.22	263.95	84.78	0.00	-1.54	-0.74	---	---
	Horz. rgt. reinf.	149.40	327.22	263.95	84.78	0.00	-1.54	-0.74	---	---
	Vert. lft. reinf.	178.50	327.22	263.95	84.78	-4.59	-1.54	-0.74	---	---
	Horz. lft. reinf.	156.91	327.22	263.95	84.78	-4.59	-1.54	-0.74	---	---
	Concrete	14.78	-643.45	-403.91	157.19	-12.87	-1.77	0.71	---	---
	Transve. reinf.	0.36	-221.18	-25.31	41.56	---	---	---	-3.27	1.83
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	121.62	318.57	330.97	103.19	0.00	-1.53	-0.68	---	---
	Horz. rgt. reinf.	121.64	318.57	330.97	103.19	0.00	-1.53	-0.68	---	---
	Vert. lft. reinf.	135.61	318.57	330.97	103.19	-4.18	-1.53	-0.68	---	---
	Horz. lft. reinf.	132.54	318.57	330.97	103.19	-4.18	-1.53	-0.68	---	---



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Wall W43: Length: 100.2 cm [Initial node: 20.00;17.30 -> Final node: 20.00;18.30]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Concrete	18.98	-691.10	-3.67	-66.83	13.82	-0.02	0.24	---	---
	Transve. reinf.	0.35	-264.76	-18.43	28.82	---	---	---	-3.17	1.80
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	107.67	755.07	48.15	38.18	4.14	1.00	0.11	---	---
	Horz. rgt. reinf.	132.91	109.66	332.03	96.01	0.00	-1.31	-0.39	---	---
	Vert. lft. reinf.	102.43	755.07	48.15	38.18	0.00	1.00	0.11	---	---
	Horz. lft. reinf.	142.33	105.65	332.14	95.78	-2.56	-1.40	-0.45	---	---
	Concrete	33.18	-1348.89	-137.82	-59.26	26.98	-0.52	-0.06	---	---
	Transve. reinf.	0.69	-329.79	7.83	8.22	---	---	---	-7.15	-0.38
Wall W44: Length: 100.8 cm [Initial node: 20.00;11.70 -> Final node: 20.00;12.71]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	246.51	248.80	19.65	-53.39	8.47	1.27	-0.38	---	---
	Horz. rgt. reinf.	73.28	204.74	131.99	-52.62	0.00	-2.55	1.12	---	---
	Vert. lft. reinf.	135.84	216.59	124.83	-50.62	-8.60	-3.45	1.50	---	---
	Horz. lft. reinf.	95.52	204.60	128.80	-51.00	-8.05	-3.27	1.43	---	---
	Concrete	7.88	-253.52	-40.52	-38.81	14.42	1.72	0.93	---	---
	Transve. reinf.	1.29	-173.81	-29.12	-55.18	---	---	---	-13.00	3.68
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	162.88	436.66	416.83	-168.73	0.00	-1.44	1.18	---	---
	Horz. rgt. reinf.	228.94	436.66	416.83	-168.73	0.00	-1.44	1.18	---	---
	Vert. lft. reinf.	175.42	438.56	406.50	-154.99	-4.18	-2.32	1.66	---	---
	Horz. lft. reinf.	245.96	436.66	416.83	-168.73	-2.82	-1.44	1.18	---	---
	Concrete	15.58	436.66	416.83	-168.73	0.00	-1.44	1.18	---	---
	Transve. reinf.	1.04	-349.62	-53.36	-109.00	---	---	---	-10.38	3.21
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	222.75	432.64	618.08	-186.29	0.00	-1.49	1.50	---	---
	Horz. rgt. reinf.	319.28	431.26	621.10	-186.06	0.00	-1.48	1.50	---	---
	Vert. lft. reinf.	145.30	432.64	618.08	-186.29	-3.29	-1.49	1.50	---	---
	Horz. lft. reinf.	327.12	431.26	621.10	-186.06	-3.28	-1.48	1.50	---	---
	Concrete	21.35	-853.59	-128.20	-128.80	-17.07	0.87	0.83	---	---
	Transve. reinf.	1.22	-466.25	-65.32	-114.64	---	---	---	-12.22	3.48
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	264.06	379.92	745.28	-183.63	0.00	-1.41	1.41	---	---
	Horz. rgt. reinf.	313.56	378.99	745.98	-183.40	0.00	-1.41	1.42	---	---
	Vert. lft. reinf.	286.45	379.92	745.28	-183.63	-2.90	-1.41	1.41	---	---
	Horz. lft. reinf.	330.16	378.99	745.98	-183.40	-2.92	-1.41	1.42	---	---
	Concrete	27.52	-1096.66	-156.81	-142.12	-21.93	0.89	0.89	---	---
	Transve. reinf.	1.21	-522.08	-67.56	-111.57	---	---	---	-12.20	3.28
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	95.19	681.90	58.82	-33.37	2.03	0.36	-0.03	---	---
	Horz. rgt. reinf.	275.12	93.46	751.14	-101.02	0.00	-1.27	1.10	---	---
	Vert. lft. reinf.	93.85	689.16	58.68	33.81	-0.51	-0.08	-0.06	---	---
	Horz. lft. reinf.	163.42	93.46	751.14	-101.02	-2.06	-1.27	1.10	---	---
	Concrete	39.44	-617.29	230.59	4.87	12.35	-1.04	0.67	---	---
	Transve. reinf.	0.67	-355.52	20.66	-28.41	---	---	---	-6.88	0.03



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Wall W45: Length: 99.9 cm [Initial node: 16.48;16.50 -> Final node: 17.48;16.50]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	154.20	340.23	301.88	98.55	0.00	-0.04	-0.30	---	---
	Horz. rgt. reinf.	166.21	340.23	301.88	98.55	0.00	-0.04	-0.30	---	---
	Vert. lft. reinf.	159.41	340.23	301.88	98.55	-1.20	-0.04	-0.30	---	---
	Horz. lft. reinf.	168.83	340.23	301.88	98.55	-1.20	-0.04	-0.30	---	---
	Concrete	9.69	-354.66	26.81	-2.50	-7.09	0.22	-0.34	---	---
	Transve. reinf.	1.45	-50.89	27.93	-0.16	---	---	---	8.40	12.56
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	386.68	403.84	521.30	170.81	0.00	-0.39	-0.58	---	---
	Horz. rgt. reinf.	298.25	383.23	535.06	162.56	0.00	-0.14	-0.52	---	---
	Vert. lft. reinf.	239.85	403.84	521.30	170.81	-1.63	-0.39	-0.58	---	---
	Horz. lft. reinf.	289.48	383.23	535.06	162.56	-1.54	-0.14	-0.52	---	---
	Concrete	15.20	403.84	521.30	170.81	0.00	-0.39	-0.58	---	---
	Transve. reinf.	1.42	-189.51	-60.77	17.32	---	---	---	14.86	-0.34
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	216.73	409.23	628.45	180.98	0.00	-0.44	-0.67	---	---
	Horz. rgt. reinf.	326.58	406.70	632.08	180.62	0.00	-0.44	-0.68	---	---
	Vert. lft. reinf.	228.79	393.62	618.95	176.36	-4.40	-0.50	-1.42	---	---
	Horz. lft. reinf.	334.21	406.70	632.08	180.62	-1.92	-0.44	-0.68	---	---
	Concrete	16.49	393.62	618.95	176.36	0.00	-0.50	-1.42	---	---
	Transve. reinf.	1.63	-281.69	-74.49	25.76	---	---	---	16.95	-1.33
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	123.07	341.51	457.21	-133.96	0.97	0.28	-0.07	---	---
	Horz. rgt. reinf.	328.80	295.08	687.30	150.98	0.00	-0.35	-0.67	---	---
	Vert. lft. reinf.	128.02	297.00	686.73	151.50	-1.94	-0.36	-0.67	---	---
	Horz. lft. reinf.	335.09	295.08	687.30	150.98	-1.95	-0.35	-0.67	---	---
	Concrete	22.05	-900.55	-124.65	66.72	-18.01	0.22	-0.25	---	---
	Transve. reinf.	1.77	-336.81	-88.44	26.06	---	---	---	18.32	-2.14
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	128.80	715.07	50.24	-31.39	0.00	-0.09	0.01	---	---
	Horz. rgt. reinf.	252.70	-65.87	590.25	35.75	1.32	-0.02	-0.41	---	---
	Vert. lft. reinf.	129.36	715.07	50.24	-31.39	-0.34	-0.09	0.01	---	---
	Horz. lft. reinf.	254.08	-65.87	590.25	35.75	-1.32	-0.02	-0.41	---	---
	Concrete	28.81	-1161.49	-119.21	48.38	-23.23	0.28	-0.05	---	---
	Transve. reinf.	1.79	-447.63	1.01	6.96	---	---	---	18.36	-3.38

Wall W47: Length: 99.2 cm [Initial node: 35.90;13.21 -> Final node: 35.90;14.20]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	170.23	-36.04	-0.56	-13.76	30.86	3.56	-1.72	---	---
	Horz. rgt. reinf.	50.69	167.81	162.93	-58.79	0.00	-8.08	8.84	---	---
	Vert. lft. reinf.	188.87	196.22	178.76	-75.35	-18.20	-6.47	7.31	---	---
	Horz. lft. reinf.	158.66	196.22	178.76	-75.35	-18.20	-6.47	7.31	---	---
	Concrete	14.27	167.81	162.93	-58.79	-21.90	-8.08	8.84	---	---
	Transve. reinf.	2.26	-76.29	-1.59	-39.61	---	---	---	-23.54	2.21
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	171.44	208.15	187.27	-54.62	0.00	-2.34	0.90	---	---
	Horz. rgt. reinf.	128.45	126.13	246.17	40.58	0.00	2.78	-0.28	---	---
	Vert. lft. reinf.	223.85	208.15	187.27	-54.62	-7.50	-2.34	0.90	---	---
	Horz. lft. reinf.	125.49	144.74	248.82	47.99	-3.28	1.47	-0.86	---	---
	Concrete	14.06	-398.29	-19.65	63.19	-7.97	3.17	1.80	---	---
	Transve. reinf.	2.06	-257.64	-147.93	23.54	---	---	---	-0.19	-21.53
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	202.00	88.34	20.44	-27.96	20.85	2.27	-1.52	---	---



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Wall W47: Length: 99.2 cm [Initial node: 35.90;13.21 -> Final node: 35.90;14.20]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. rgt. reinf.	162.25	79.24	334.65	27.62	0.00	3.86	-0.07	---	---
	Vert. lft. reinf.	261.48	227.12	275.65	-74.99	-9.06	-2.36	1.05	---	---
	Horz. lft. reinf.	167.79	167.58	267.52	-62.60	-13.22	-4.70	1.96	---	---
	Concrete	20.40	-581.80	-30.47	86.38	-11.64	3.90	1.49	---	---
	Transve. reinf.	2.26	-318.31	-149.61	37.15	---	---	---	-1.38	-23.58
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	172.70	236.04	37.11	-29.73	20.63	2.29	-1.44	---	---
	Horz. rgt. reinf.	179.63	-104.62	393.95	-31.89	2.09	1.61	-2.04	---	---
	Vert. lft. reinf.	229.43	178.47	336.34	-83.16	-7.87	-1.74	0.67	---	---
	Horz. lft. reinf.	188.83	102.02	332.36	-68.83	-11.93	-4.04	1.54	---	---
	Concrete	23.65	-862.08	-44.53	103.57	-17.24	2.92	1.70	---	---
	Transve. reinf.	2.35	-312.46	-141.96	40.44	---	---	---	-2.48	-24.50
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	106.59	572.19	42.94	-21.41	6.90	1.60	-0.24	---	---
	Horz. rgt. reinf.	191.24	-391.88	383.79	-116.15	7.84	1.67	-1.86	---	---
	Vert. lft. reinf.	176.79	593.73	42.70	-23.08	0.00	0.86	-0.05	---	---
	Horz. lft. reinf.	171.35	-391.88	383.79	-116.15	-7.84	1.67	-1.86	---	---
	Concrete	27.89	-1117.36	-124.98	42.41	22.35	0.99	-0.16	---	---
	Transve. reinf.	1.68	-225.02	-106.45	-1.68	---	---	---	-0.04	-17.42

Wall W49: Length: 100.5 cm [Initial node: 35.90;15.80 -> Final node: 35.90;16.80]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	148.46	-66.86	-10.28	-3.86	31.18	4.65	-1.99	---	---
	Horz. rgt. reinf.	37.50	-92.78	-10.46	-17.70	30.77	4.52	-2.25	---	---
	Vert. lft. reinf.	91.57	140.18	128.14	33.63	-15.98	-5.63	-5.57	---	---
	Horz. lft. reinf.	104.78	140.18	128.14	33.63	-15.98	-5.63	-5.57	---	---
	Concrete	11.96	-129.08	5.13	16.78	-35.00	-4.04	-1.25	---	---
	Transve. reinf.	2.83	-158.66	5.38	-32.49	---	---	---	-29.55	0.43
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	256.82	271.02	392.15	121.85	0.00	-0.82	-2.14	---	---
	Horz. rgt. reinf.	220.87	250.42	406.76	112.97	0.00	1.06	-1.07	---	---
	Vert. lft. reinf.	322.98	238.83	398.59	108.40	-11.24	-3.27	-4.04	---	---
	Horz. lft. reinf.	246.24	238.83	398.59	108.40	-11.24	-3.27	-4.04	---	---
	Concrete	13.49	-441.55	-395.79	-196.29	-15.37	-10.98	-6.34	---	---
	Transve. reinf.	2.77	-326.98	-184.23	-5.90	---	---	---	-1.72	-28.94
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	306.87	302.06	578.43	153.94	0.00	0.04	-2.09	---	---
	Horz. rgt. reinf.	313.12	283.30	584.41	144.13	0.00	2.55	-0.35	---	---
	Vert. lft. reinf.	362.78	302.06	578.43	153.94	-6.25	0.04	-2.09	---	---
	Horz. lft. reinf.	326.77	244.56	586.12	131.67	-11.23	-2.44	-4.01	---	---
	Concrete	20.19	-583.30	-22.02	-59.75	-11.67	2.91	-0.31	---	---
	Transve. reinf.	2.95	-496.73	-256.40	-13.51	---	---	---	-3.44	-30.72
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	182.00	272.55	689.49	159.22	0.00	0.65	-1.80	---	---
	Horz. rgt. reinf.	343.37	243.44	686.10	144.26	0.00	3.04	-0.35	---	---
	Vert. lft. reinf.	348.86	272.55	689.49	159.22	-5.64	0.65	-1.80	---	---
	Horz. lft. reinf.	361.37	189.37	694.25	127.55	-10.61	-1.86	-3.70	---	---
	Concrete	24.91	-914.09	-29.16	-76.33	-18.28	2.36	0.40	---	---
	Transve. reinf.	3.18	-606.10	-306.73	-24.60	---	---	---	-4.79	-32.93
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	99.58	562.05	37.70	22.90	3.27	0.98	0.05	---	---
	Horz. rgt. reinf.	288.85	55.40	648.08	91.14	0.00	0.34	-1.64	---	---
	Vert. lft. reinf.	167.47	562.05	37.70	22.90	0.00	0.98	0.05	---	---



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Wall W49: Length: 100.5 cm [Initial node: 35.90;15.80 -> Final node: 35.90;16.80]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. lft. reinf.	297.67	55.40	648.08	91.14	-4.74	0.34	-1.64	---	---
	Concrete	29.15	-1170.19	-131.16	-44.46	23.40	1.34	0.20	---	---
	Transve. reinf.	2.89	-611.65	-286.61	-63.44	---	---	---	-2.69	-29.94

Wall W50: Length: 137 cm [Initial node: 34.68;20.00 -> Final node: 36.05;20.00]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	207.28	-30.59	-80.78	60.55	33.77	4.52	1.42	---	---
	Horz. rgt. reinf.	39.63	-30.59	-80.75	60.63	33.72	4.51	1.41	---	---
	Vert. lft. reinf.	131.46	-141.83	-13.93	-11.51	-37.20	-4.06	1.37	---	---
	Horz. lft. reinf.	27.12	-141.83	-13.93	-11.51	-37.20	-4.06	1.37	---	---
	Concrete	14.28	-301.22	24.96	-48.46	-21.43	-4.06	-0.27	---	---
	Transve. reinf.	2.49	-238.37	15.53	-7.69	---	---	---	26.02	-2.08
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	9.69	-739.57	-735.39	-372.54	-14.79	5.55	4.00	---	---
	Horz. rgt. reinf.	7.72	-737.76	-740.52	-372.53	-14.76	5.64	4.08	---	---
	Vert. lft. reinf.	9.69	-739.57	-735.39	-372.54	14.79	5.55	4.00	---	---
	Horz. lft. reinf.	8.72	-737.76	-740.52	-372.53	14.76	5.64	4.08	---	---
	Concrete	21.36	-737.76	-740.52	-372.53	14.76	5.64	4.08	---	---
	Transve. reinf.	2.36	-261.09	-175.40	-85.43	---	---	---	15.03	19.64
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	115.52	12.59	156.78	-11.25	14.35	7.98	-2.35	---	---
	Horz. rgt. reinf.	106.39	12.59	156.78	-11.25	14.35	7.98	-2.35	---	---
	Vert. lft. reinf.	12.18	-745.68	8.14	78.26	14.91	1.07	-0.57	---	---
	Horz. lft. reinf.	76.82	-32.87	198.48	-14.76	4.09	3.38	1.60	---	---
	Concrete	25.83	-745.68	8.14	78.26	14.91	1.07	-0.57	---	---
	Transve. reinf.	2.56	-601.87	-404.94	-85.26	---	---	---	15.58	21.78
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	58.11	-425.80	140.63	-169.37	-8.52	4.83	2.48	---	---
	Horz. rgt. reinf.	130.67	-222.57	265.94	-71.16	4.45	2.82	1.15	---	---
	Vert. lft. reinf.	196.36	6.15	10.03	-29.61	-29.23	-3.07	1.76	---	---
	Horz. lft. reinf.	117.41	-222.57	265.94	-71.16	-4.45	2.82	1.15	---	---
	Concrete	34.14	-987.18	-1.05	103.46	19.74	1.27	-0.51	---	---
	Transve. reinf.	2.76	-830.64	-330.50	-84.32	---	---	---	-25.83	13.07
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	68.17	-881.61	105.82	-322.05	-17.63	4.16	2.01	---	---
	Horz. rgt. reinf.	144.18	-631.13	224.39	-208.01	12.62	2.50	1.02	---	---
	Vert. lft. reinf.	132.92	499.50	38.57	-15.88	-6.56	-1.70	0.41	---	---
	Horz. lft. reinf.	131.64	-631.13	224.39	-208.01	-12.62	2.50	1.02	---	---
	Concrete	36.40	-1469.20	-183.08	-61.75	29.38	-0.99	-0.18	---	---
	Transve. reinf.	2.94	-879.04	-321.83	-115.43	---	---	---	-27.40	13.46

Wall W51: Length: 180.8 cm [Initial node: 34.68;10.00 -> Final node: 36.48;10.00]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	344.75	110.97	15.18	-17.01	41.83	4.20	-3.24	---	---
	Horz. rgt. reinf.	67.90	-86.12	-1.68	-29.11	49.57	4.60	-4.95	---	---
	Vert. lft. reinf.	91.22	-52.22	-92.52	-30.70	-47.32	-5.77	-1.72	---	---
	Horz. lft. reinf.	24.51	-81.07	-117.86	-96.00	-28.39	-5.37	0.71	---	---
	Concrete	15.50	-282.43	-31.40	-2.69	37.92	6.02	-0.61	---	---
	Transve. reinf.	3.16	-275.19	28.00	-18.45	---	---	---	-33.04	1.45



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Wall W51: Length: 180.8 cm [Initial node: 34.68;10.00 -> Final node: 36.48;10.00]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	155.39	-221.51	-26.10	4.53	50.79	5.19	-2.99	---	---
	Horz. rgt. reinf.	33.12	-225.68	-22.18	-9.24	47.41	4.75	-2.99	---	---
	Vert. lft. reinf.	152.41	-143.75	-107.99	-21.47	-42.21	-5.14	-3.09	---	---
	Horz. lft. reinf.	61.52	105.52	70.87	-8.82	-6.71	-5.34	1.75	---	---
	Concrete	25.62	-838.66	-920.39	-433.34	-16.77	-11.23	-6.31	---	---
	Transve. reinf.	5.04	-453.39	-458.04	-157.72	---	---	---	0.93	-52.73
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	12.40	-557.24	-163.45	-13.91	-38.80	-4.29	-4.63	---	---
	Horz. rgt. reinf.	11.85	-929.24	-981.52	-474.27	-18.58	-10.72	-6.12	---	---
	Vert. lft. reinf.	64.29	5.14	143.68	-10.08	-6.77	-5.25	1.80	---	---
	Horz. lft. reinf.	87.35	5.14	143.68	-10.08	-6.77	-5.25	1.80	---	---
	Concrete	27.98	-757.88	-82.51	-3.73	34.29	4.14	-1.54	---	---
	Transve. reinf.	5.03	-713.28	-449.72	-151.82	---	---	---	3.38	-52.61
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	164.94	82.00	20.37	-27.91	14.53	1.04	-2.61	---	---
	Horz. rgt. reinf.	47.51	82.00	20.37	-27.91	14.53	1.04	-2.61	---	---
	Vert. lft. reinf.	58.56	-350.82	154.76	40.77	7.02	-7.31	2.45	---	---
	Horz. lft. reinf.	105.59	-295.32	149.34	-104.71	-14.68	-10.18	-5.86	---	---
	Concrete	34.77	-1000.92	-111.29	-3.75	35.90	4.35	-1.93	---	---
	Transve. reinf.	5.02	-971.95	-436.32	-145.37	---	---	---	4.87	-52.35
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	181.91	656.45	67.90	-29.25	2.16	0.53	-0.02	---	---
	Horz. rgt. reinf.	66.45	122.74	1.69	-152.11	0.65	0.22	0.23	---	---
	Vert. lft. reinf.	176.88	656.45	67.90	-29.25	0.00	0.53	-0.02	---	---
	Horz. lft. reinf.	130.18	-785.57	139.50	-266.74	-15.71	-8.27	-4.48	---	---
	Concrete	61.51	-1817.88	-8.09	-194.24	-36.36	1.14	-0.39	---	---
	Transve. reinf.	5.41	-1236.67	-417.27	-134.39	---	---	---	19.37	-53.17

Wall W54: Length: 99.2 cm [Initial node: 35.00;13.21 -> Final node: 35.00;14.20]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	213.94	182.79	165.89	64.81	6.86	0.38	2.17	---	---
	Horz. rgt. reinf.	116.65	182.79	165.89	64.81	6.86	0.38	2.17	---	---
	Vert. lft. reinf.	138.77	233.41	103.16	-49.16	-8.00	-3.49	1.43	---	---
	Horz. lft. reinf.	88.51	182.79	165.89	64.81	0.00	0.38	2.17	---	---
	Concrete	10.20	-167.50	-19.38	-13.67	25.45	3.17	2.62	---	---
	Transve. reinf.	1.60	-65.54	6.04	15.21	---	---	---	10.63	12.89
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	246.92	258.47	339.15	-100.09	0.65	-1.71	-0.01	---	---
	Horz. rgt. reinf.	185.07	258.47	339.15	-100.09	0.65	-1.71	-0.01	---	---
	Vert. lft. reinf.	198.56	285.82	347.77	-105.33	-8.62	-7.21	3.71	---	---
	Horz. lft. reinf.	225.10	285.82	347.77	-105.33	-8.62	-7.21	3.71	---	---
	Concrete	17.15	-254.98	1.75	-18.44	43.08	5.11	-2.93	---	---
	Transve. reinf.	2.61	-272.70	-153.41	12.34	---	---	---	9.78	-25.47
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	202.63	370.33	489.21	-148.51	0.00	-9.27	4.96	---	---
	Horz. rgt. reinf.	247.60	312.13	492.47	-135.54	0.00	-2.82	0.52	---	---
	Vert. lft. reinf.	203.74	370.33	489.21	-148.51	-11.66	-9.27	4.96	---	---
	Horz. lft. reinf.	304.99	370.33	489.21	-148.51	-11.66	-9.27	4.96	---	---
	Concrete	23.36	-397.69	8.41	-29.11	51.51	6.10	-3.59	---	---
	Transve. reinf.	3.30	-406.48	-205.46	13.41	---	---	---	12.43	-32.03
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	90.83	374.65	583.47	-164.85	0.00	-10.48	5.47	---	---



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Wall W54: Length: 99.2 cm [Initial node: 35.00;13.21 -> Final node: 35.00;14.20]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. rgt. reinf.	280.30	300.43	606.19	-149.23	0.00	-3.72	0.93	---	---
	Vert. lft. reinf.	217.48	374.65	583.47	-164.85	-12.56	-10.48	5.47	---	---
	Horz. lft. reinf.	353.66	374.65	583.47	-164.85	-12.56	-10.48	5.47	---	---
	Concrete	28.07	-536.35	10.94	-31.68	53.64	6.31	-3.90	---	---
	Transve. reinf.	117647.06	80.11	175.57	6.36	---	---	---	-19.85	47.09
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	150.60	692.31	61.75	-27.29	5.86	1.43	-0.34	---	---
	Horz. rgt. reinf.	257.23	108.31	587.78	-106.03	0.00	-3.76	1.11	---	---
	Vert. lft. reinf.	139.33	692.31	61.75	-27.29	0.00	1.43	-0.34	---	---
	Horz. lft. reinf.	295.50	190.07	534.16	-119.44	-8.54	-8.48	4.01	---	---
	Concrete	26.59	-620.64	10.33	-4.26	38.31	4.41	-3.04	---	---
	Transve. reinf.	2.99	-563.08	-207.31	50.68	---	---	---	10.75	-29.13

Wall W55: Length: 100 cm [Initial node: 35.00;15.80 -> Final node: 35.00;16.80]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	158.19	252.77	199.98	102.25	10.46	0.87	3.44	---	---
	Horz. rgt. reinf.	145.01	244.78	198.37	101.74	10.53	1.35	3.52	---	---
	Vert. lft. reinf.	176.39	251.06	185.92	94.92	0.00	-2.37	-0.07	---	---
	Horz. lft. reinf.	131.89	251.06	185.92	94.92	0.00	-2.37	-0.07	---	---
	Concrete	11.31	244.78	198.37	101.74	0.00	1.35	3.52	---	---
	Transve. reinf.	2.20	-36.73	-4.25	58.10	---	---	---	21.02	9.30
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	204.71	177.13	319.09	57.07	6.25	-0.40	1.28	---	---
	Horz. rgt. reinf.	164.81	176.74	319.87	57.13	6.23	-0.41	1.27	---	---
	Vert. lft. reinf.	130.29	52.97	-50.16	48.95	-29.75	-4.07	0.86	---	---
	Horz. lft. reinf.	163.54	197.04	320.77	58.11	0.00	-2.06	-0.41	---	---
	Concrete	17.50	-267.36	22.56	-79.31	40.06	5.29	-1.31	---	---
	Transve. reinf.	2.49	-144.55	-14.80	85.13	---	---	---	23.49	11.29
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	160.09	147.16	460.54	72.11	7.00	-0.77	1.37	---	---
	Horz. rgt. reinf.	221.79	147.16	460.54	72.11	7.00	-0.77	1.37	---	---
	Vert. lft. reinf.	133.31	38.63	-29.42	-5.97	-40.66	-5.63	0.73	---	---
	Horz. lft. reinf.	233.32	200.67	468.54	80.52	-0.39	-2.87	-0.74	---	---
	Concrete	22.64	-388.05	10.53	-22.05	50.00	6.73	-1.20	---	---
	Transve. reinf.	3.02	-345.38	-25.56	34.21	---	---	---	29.89	10.19
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	182.98	165.58	554.71	90.44	0.00	-3.32	-0.97	---	---
	Horz. rgt. reinf.	253.09	163.92	556.35	90.40	0.00	-3.32	-0.96	---	---
	Vert. lft. reinf.	174.90	61.33	-26.13	-7.51	-43.78	-6.06	0.93	---	---
	Horz. lft. reinf.	274.74	163.92	556.35	90.40	-0.89	-3.32	-0.96	---	---
	Concrete	27.84	-553.24	15.60	-12.96	51.39	6.94	-1.30	---	---
	Transve. reinf.	2.98	-522.23	-36.94	26.72	---	---	---	30.04	8.23
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	80.46	619.59	45.51	25.48	0.00	-0.25	0.01	---	---
	Horz. rgt. reinf.	133.17	-22.72	309.78	67.60	0.45	-2.80	-0.81	---	---
	Vert. lft. reinf.	126.82	619.59	45.51	25.48	-0.91	-0.25	0.01	---	---
	Horz. lft. reinf.	156.17	-22.72	309.78	67.60	-0.45	-2.80	-0.81	---	---
	Concrete	26.93	-653.31	20.56	-13.01	34.92	4.62	-1.17	---	---
	Transve. reinf.	0.98	-408.80	0.85	105.32	---	---	---	4.11	-9.33



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Wall W56: Length: 140.4 cm [Initial node: 29.57;14.03 -> Final node: 30.97;14.03]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	274.77	352.27	138.84	-61.21	0.00	0.14	-0.14	---	---
	Horz. rgt. reinf.	100.31	352.27	138.84	-61.21	0.00	0.14	-0.14	---	---
	Vert. lft. reinf.	278.23	352.35	138.62	-61.10	-0.82	0.12	-0.14	---	---
	Horz. lft. reinf.	98.41	352.27	138.84	-61.21	-0.75	0.14	-0.14	---	---
	Concrete	15.44	-584.68	-652.93	-229.75	-11.69	-1.08	-0.69	---	---
	Transve. reinf.	1.25	-342.60	-7.71	-143.21	---	---	---	-12.99	-1.37
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	245.34	279.11	267.42	-84.97	0.00	0.38	-0.15	---	---
	Horz. rgt. reinf.	158.15	279.11	267.42	-84.97	0.00	0.38	-0.15	---	---
	Vert. lft. reinf.	246.57	279.11	267.42	-84.97	-0.54	0.38	-0.15	---	---
	Horz. lft. reinf.	154.84	279.11	267.42	-84.97	-0.54	0.38	-0.15	---	---
	Concrete	12.90	-354.12	2.33	-101.04	7.08	0.45	0.23	---	---
	Transve. reinf.	1.67	-320.70	2.09	-93.87	---	---	---	-17.37	-2.11
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	298.23	320.52	365.51	-119.37	0.02	0.58	-0.21	---	---
	Horz. rgt. reinf.	215.52	317.10	367.40	-119.43	0.02	0.58	-0.21	---	---
	Vert. lft. reinf.	295.54	320.52	365.51	-119.37	0.00	0.58	-0.21	---	---
	Horz. lft. reinf.	210.29	317.10	367.40	-119.43	0.00	0.58	-0.21	---	---
	Concrete	16.52	-297.92	-57.09	68.07	-38.98	-4.18	0.04	---	---
	Transve. reinf.	1.61	-400.58	-0.49	-114.31	---	---	---	-16.76	-2.09
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	120.43	235.51	434.98	-131.23	0.39	0.70	-0.20	---	---
	Horz. rgt. reinf.	228.64	235.51	434.98	-131.23	0.39	0.70	-0.20	---	---
	Vert. lft. reinf.	118.04	235.51	434.98	-131.23	0.00	0.70	-0.20	---	---
	Horz. lft. reinf.	222.90	235.51	434.98	-131.23	0.00	0.70	-0.20	---	---
	Concrete	21.83	-868.18	-97.06	32.83	-17.36	0.50	-0.01	---	---
	Transve. reinf.	1.52	-395.23	-0.55	-121.93	---	---	---	-15.68	-2.01
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	147.88	874.07	88.38	-40.19	0.00	-0.15	0.05	---	---
	Horz. rgt. reinf.	155.16	-91.92	390.01	-92.30	1.84	0.57	-0.16	---	---
	Vert. lft. reinf.	148.82	874.07	88.38	-40.19	-0.56	-0.15	0.05	---	---
	Horz. lft. reinf.	151.41	-91.92	390.01	-92.30	-1.84	0.57	-0.16	---	---
	Concrete	36.99	-1406.28	-38.27	79.90	28.13	-0.30	0.02	---	---
	Transve. reinf.	1.02	-238.61	16.57	-100.63	---	---	---	-10.33	-2.17

Wall W57: Length: 142.3 cm [Initial node: 29.55;16.50 -> Final node: 30.97;16.50]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	180.00	366.10	157.76	-68.74	4.01	0.89	-0.18	---	---
	Horz. rgt. reinf.	106.72	366.10	157.76	-68.74	4.01	0.89	-0.18	---	---
	Vert. lft. reinf.	287.00	366.10	157.76	-68.74	0.00	0.89	-0.18	---	---
	Horz. lft. reinf.	107.49	366.10	157.76	-68.74	0.00	0.89	-0.18	---	---
	Concrete	15.90	-118.92	-64.30	145.72	22.75	2.46	0.04	---	---
	Transve. reinf.	1.13	-395.41	-6.96	-163.98	---	---	---	11.84	0.83
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	276.16	287.78	283.00	-89.88	3.84	0.74	-0.16	---	---
	Horz. rgt. reinf.	170.14	287.05	284.18	-90.10	3.87	0.75	-0.17	---	---
	Vert. lft. reinf.	252.65	287.78	283.00	-89.88	0.00	0.74	-0.16	---	---
	Horz. lft. reinf.	162.68	287.05	284.18	-90.10	0.00	0.75	-0.17	---	---
	Concrete	15.70	-427.80	5.99	-128.70	-8.56	1.09	-0.79	---	---
	Transve. reinf.	1.48	-266.19	-3.89	-36.79	---	---	---	15.45	1.60
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	320.10	320.97	382.05	-123.52	3.45	0.58	-0.10	---	---



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Wall W57: Length: 142.3 cm [Initial node: 29.55;16.50 -> Final node: 30.97;16.50]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. rgt. reinf.	224.84	317.42	383.96	-123.57	3.46	0.58	-0.10	---	---
	Vert. lft. reinf.	299.80	320.97	382.05	-123.52	0.00	0.58	-0.10	---	---
	Horz. lft. reinf.	219.03	317.42	383.96	-123.57	0.00	0.58	-0.10	---	---
	Concrete	18.58	-350.86	-59.91	74.25	41.35	4.39	-0.23	---	---
	Transve. reinf.	1.55	-472.57	-13.65	-30.38	---	---	---	16.12	1.70
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	124.23	225.56	448.73	-133.50	2.91	0.41	-0.05	---	---
	Horz. rgt. reinf.	233.88	225.56	448.73	-133.50	2.91	0.41	-0.05	---	---
	Vert. lft. reinf.	117.25	225.56	448.73	-133.50	0.00	0.41	-0.05	---	---
	Horz. lft. reinf.	230.18	225.56	448.73	-133.50	0.00	0.41	-0.05	---	---
	Concrete	23.30	-879.97	-35.57	51.34	-17.60	0.06	0.01	---	---
	Transve. reinf.	1.49	-703.78	-21.80	-13.70	---	---	---	15.47	1.67
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	145.37	861.63	86.25	-40.12	0.00	-0.56	0.06	---	---
	Horz. rgt. reinf.	111.68	-123.35	395.14	-88.61	2.47	0.05	0.06	---	---
	Vert. lft. reinf.	148.72	861.63	86.25	-40.12	-1.77	-0.56	0.06	---	---
	Horz. lft. reinf.	172.22	-123.35	395.14	-88.61	-2.47	0.05	0.06	---	---
	Concrete	39.72	-1516.38	-38.49	78.13	30.33	-0.05	0.14	---	---
	Transve. reinf.	4.58	266.42	39.17	-168.80	---	---	---	4.01	0.70

Wall W58: Length: 99.4 cm [Initial node: 32.49;16.50 -> Final node: 33.49;16.50]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	165.95	302.67	262.71	-77.53	1.63	0.55	-0.42	---	---
	Horz. rgt. reinf.	148.36	302.67	262.71	-77.53	1.63	0.55	-0.42	---	---
	Vert. lft. reinf.	157.48	303.00	262.89	-77.56	0.00	0.53	-0.40	---	---
	Horz. lft. reinf.	141.71	303.00	262.89	-77.56	0.00	0.53	-0.40	---	---
	Concrete	10.54	-443.90	-373.12	-149.16	8.88	1.01	0.75	---	---
	Transve. reinf.	1.38	-74.51	-39.86	33.57	---	---	---	-7.19	-12.42
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	104.24	301.55	266.22	-77.26	1.73	0.94	-0.31	---	---
	Horz. rgt. reinf.	103.95	280.51	271.97	-71.46	2.28	1.24	-0.43	---	---
	Vert. lft. reinf.	99.94	300.45	224.02	80.75	-0.05	-0.30	-0.17	---	---
	Horz. lft. reinf.	97.55	301.55	266.22	-77.26	0.00	0.94	-0.31	---	---
	Concrete	12.89	-570.76	-347.83	-158.07	-11.42	1.20	0.34	---	---
	Transve. reinf.	0.70	-173.86	-5.71	37.23	---	---	---	7.22	-1.01
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	113.91	343.77	349.00	112.48	0.00	-0.43	-0.18	---	---
	Horz. rgt. reinf.	63.62	342.80	349.78	112.45	0.00	-0.44	-0.19	---	---
	Vert. lft. reinf.	120.14	343.77	349.00	112.48	-0.33	-0.43	-0.18	---	---
	Horz. lft. reinf.	110.23	342.80	349.78	112.45	-0.34	-0.44	-0.19	---	---
	Concrete	16.33	-721.47	-443.99	-203.56	-14.43	1.08	0.26	---	---
	Transve. reinf.	0.81	-263.73	-10.04	58.63	---	---	---	8.29	-1.37
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	138.39	297.42	431.12	123.25	0.00	-0.54	-0.19	---	---
	Horz. rgt. reinf.	76.20	297.42	431.12	123.25	0.00	-0.54	-0.19	---	---
	Vert. lft. reinf.	148.17	297.42	431.12	123.25	-0.61	-0.54	-0.19	---	---
	Horz. lft. reinf.	132.44	297.42	431.12	123.25	-0.61	-0.54	-0.19	---	---
	Concrete	19.95	-479.43	4.65	62.91	-24.89	-3.34	-0.62	---	---
	Transve. reinf.	1.09	-346.86	-9.35	-37.09	---	---	---	11.08	-1.42
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	122.18	669.59	41.54	31.22	1.08	0.24	0.04	---	---
	Horz. rgt. reinf.	129.30	10.99	397.26	84.38	0.00	-0.45	-0.10	---	---
	Vert. lft. reinf.	120.46	669.96	41.70	31.18	0.00	0.23	0.04	---	---



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Wall W58: Length: 99.4 cm [Initial node: 32.49;16.50 -> Final node: 33.49;16.50]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. lft. reinf.	131.75	10.99	397.26	84.38	-0.40	-0.45	-0.10	---	---
	Concrete	30.22	-1214.23	-123.20	-51.70	24.28	-0.20	-0.02	---	---
	Transve. reinf.	0.64	-671.44	16.44	-71.78	---	---	---	-6.55	0.85

Wall W59: Length: 99.6 cm [Initial node: 32.49;14.02 -> Final node: 33.49;14.02]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	139.15	275.71	247.05	-71.09	0.82	-0.29	-0.02	---	---
	Horz. rgt. reinf.	133.65	275.71	247.05	-71.09	0.82	-0.29	-0.02	---	---
	Vert. lft. reinf.	233.07	275.71	247.05	-71.09	0.00	-0.29	-0.02	---	---
	Horz. lft. reinf.	142.39	275.71	247.05	-71.09	0.00	-0.29	-0.02	---	---
	Concrete	9.65	-350.02	13.66	0.50	7.00	0.12	-0.13	---	---
	Transve. reinf.	1.22	-86.03	-49.06	68.25	---	---	---	7.15	10.63
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	99.77	305.81	219.89	81.40	0.00	-0.93	-0.40	---	---
	Horz. rgt. reinf.	95.60	287.70	252.98	-73.20	1.67	-0.06	-0.03	---	---
	Vert. lft. reinf.	106.00	305.81	219.89	81.40	-1.95	-0.93	-0.40	---	---
	Horz. lft. reinf.	95.38	287.70	252.98	-73.20	0.00	-0.06	-0.03	---	---
	Concrete	13.29	-262.01	14.97	73.57	21.85	2.85	0.73	---	---
	Transve. reinf.	0.66	-184.63	-7.29	44.38	---	---	---	6.33	-2.58
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	120.32	353.39	345.39	113.91	0.00	-1.09	-0.51	---	---
	Horz. rgt. reinf.	105.75	353.39	345.39	113.91	0.00	-1.09	-0.51	---	---
	Vert. lft. reinf.	127.65	353.39	345.39	113.91	-2.26	-1.09	-0.51	---	---
	Horz. lft. reinf.	111.96	353.39	345.39	113.91	-2.26	-1.09	-0.51	---	---
	Concrete	17.99	-384.16	17.17	92.85	26.42	3.44	0.92	---	---
	Transve. reinf.	0.83	-285.36	-11.82	61.98	---	---	---	8.19	-2.81
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	127.04	314.37	423.99	125.32	0.00	-1.10	-0.54	---	---
	Horz. rgt. reinf.	125.68	313.75	424.74	125.32	0.00	-1.08	-0.53	---	---
	Vert. lft. reinf.	135.28	314.45	422.85	125.15	-2.21	-1.13	-0.55	---	---
	Horz. lft. reinf.	132.02	313.75	424.74	125.32	-2.14	-1.08	-0.53	---	---
	Concrete	21.10	-479.80	14.31	102.63	27.43	3.59	1.00	---	---
	Transve. reinf.	0.91	-381.94	-14.72	71.21	---	---	---	9.12	-2.57
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	127.37	695.00	46.41	31.95	1.48	0.36	0.05	---	---
	Horz. rgt. reinf.	127.40	38.78	388.73	87.88	0.00	-0.61	-0.30	---	---
	Vert. lft. reinf.	124.92	695.00	46.41	31.95	0.00	0.36	0.05	---	---
	Horz. lft. reinf.	131.44	38.78	388.73	87.88	-1.05	-0.61	-0.30	---	---
	Concrete	29.53	-1185.63	-120.37	-50.26	23.71	-0.38	-0.06	---	---
	Transve. reinf.	0.61	-548.07	13.28	-31.87	---	---	---	6.28	-0.69

Wall W11: Length: 99.9 cm [Initial node: 47.50;20.00 -> Final node: 48.50;20.00]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	117.99	-68.13	-17.01	68.30	33.50	1.55	4.41	---	---
	Horz. rgt. reinf.	95.46	20.20	63.73	-4.85	20.86	14.56	6.16	---	---
	Vert. lft. reinf.	7.00	-249.44	-163.73	-72.19	29.42	19.65	8.31	---	---
	Horz. lft. reinf.	4.43	-249.44	-163.73	-72.19	29.42	19.65	8.31	---	---
	Concrete	13.41	-69.68	-17.46	80.88	24.44	0.05	4.99	---	---
	Transve. reinf.	0.94	-123.01	-26.42	-15.18	---	---	---	4.63	8.66



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Wall W11: Length: 99.9 cm [Initial node: 47.50;20.00 -> Final node: 48.50;20.00]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	170.38	199.56	145.75	-44.74	1.92	-1.63	0.75	---	---
	Horz. rgt. reinf.	78.96	199.56	145.75	-44.74	1.92	-1.63	0.75	---	---
	Vert. lft. reinf.	167.54	199.56	145.75	-44.74	0.00	-1.63	0.75	---	---
	Horz. lft. reinf.	94.67	199.56	145.75	-44.74	0.00	-1.63	0.75	---	---
	Concrete	10.58	-402.22	-208.78	-82.16	16.12	11.74	4.39	---	---
	Transve. reinf.	0.58	-263.31	-33.14	-18.78	---	---	---	1.85	5.75
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	208.59	219.78	239.72	-70.00	3.08	-1.90	0.72	---	---
	Horz. rgt. reinf.	128.41	218.54	241.10	-70.24	2.95	-1.97	0.75	---	---
	Vert. lft. reinf.	200.11	219.78	239.72	-70.00	0.00	-1.90	0.72	---	---
	Horz. lft. reinf.	145.74	217.93	241.64	-70.31	0.00	-2.01	0.77	---	---
	Concrete	15.13	-304.23	5.54	69.95	24.60	1.94	1.57	---	---
	Transve. reinf.	0.63	-401.52	-42.23	-16.46	---	---	---	2.27	6.18
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	105.66	180.57	311.90	-87.09	2.96	-1.95	0.78	---	---
	Horz. rgt. reinf.	153.72	180.57	311.90	-87.09	2.96	-1.95	0.78	---	---
	Vert. lft. reinf.	103.77	180.57	311.90	-87.09	0.00	-1.95	0.78	---	---
	Horz. lft. reinf.	170.47	177.79	312.07	-86.81	0.00	-2.09	0.84	---	---
	Concrete	21.10	-608.94	2.71	-84.72	12.18	-2.38	2.10	---	---
	Transve. reinf.	0.73	-286.97	-4.23	-112.49	---	---	---	6.23	4.28
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	181.61	677.60	49.00	-26.74	0.00	-1.21	0.07	---	---
	Horz. rgt. reinf.	136.03	-63.21	276.42	-66.26	6.52	1.05	-0.14	---	---
	Vert. lft. reinf.	192.47	677.60	49.00	-26.74	-4.64	-1.21	0.07	---	---
	Horz. lft. reinf.	148.79	-70.87	295.11	-70.05	-1.42	-2.14	0.95	---	---
	Concrete	30.68	-1229.35	-138.92	45.13	24.59	-0.58	-0.05	---	---
	Transve. reinf.	1.16	-347.43	8.09	-128.42	---	---	---	12.09	-0.92

Wall W12: Length: 100.4 cm [Initial node: 44.25;19.25 -> Final node: 44.25;20.25]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	378.96	357.35	107.11	59.05	16.42	3.66	1.84	---	---
	Horz. rgt. reinf.	111.58	357.35	107.11	59.05	16.42	3.66	1.84	---	---
	Vert. lft. reinf.	267.06	357.35	107.11	59.05	0.00	3.66	1.84	---	---
	Horz. lft. reinf.	73.33	305.50	119.33	55.32	0.00	2.50	1.33	---	---
	Concrete	25.46	110.93	-152.82	-183.22	29.52	4.36	-3.38	---	---
	Transve. reinf.	1.80	-196.97	-30.61	82.43	---	---	---	17.56	-6.75
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	181.00	141.85	179.38	40.59	10.07	-0.08	-0.04	---	---
	Horz. rgt. reinf.	97.80	141.85	179.38	40.59	10.07	-0.08	-0.04	---	---
	Vert. lft. reinf.	31.23	91.93	170.11	30.99	10.91	0.17	0.02	---	---
	Horz. lft. reinf.	79.79	91.93	170.11	30.99	10.91	0.17	0.02	---	---
	Concrete	16.57	-382.19	-47.01	-3.27	-30.70	-6.20	-2.77	---	---
	Transve. reinf.	2.14	-369.46	15.02	82.52	---	---	---	17.64	-13.78
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	166.69	101.98	215.98	45.48	11.43	-0.10	-0.00	---	---
	Horz. rgt. reinf.	113.50	101.98	215.98	45.48	11.43	-0.10	-0.00	---	---
	Vert. lft. reinf.	104.20	101.98	215.98	45.48	0.00	-0.10	-0.00	---	---
	Horz. lft. reinf.	110.02	101.98	215.98	45.48	0.00	-0.10	-0.00	---	---
	Concrete	22.84	-711.47	-84.28	4.83	14.23	-2.42	-1.04	---	---
	Transve. reinf.	2.30	-526.48	13.95	108.77	---	---	---	19.35	-14.32
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	46.24	-63.88	229.77	30.51	10.53	-0.63	-0.33	---	---



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Wall W12: Length: 100.4 cm [Initial node: 44.25;19.25 -> Final node: 44.25;20.25]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. rgt. reinf.	103.66	-69.41	233.15	30.38	10.38	-0.68	-0.35	---	---
	Vert. lft. reinf.	39.59	-177.54	219.35	12.98	11.83	-0.05	-0.14	---	---
	Horz. lft. reinf.	106.78	-69.41	233.15	30.38	-1.39	-0.68	-0.35	---	---
	Concrete	29.70	-931.77	-110.99	0.37	18.64	-2.19	-0.80	---	---
	Transve. reinf.	2.29	-669.80	4.99	125.64	---	---	---	18.96	-14.73
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	88.93	520.71	19.66	17.01	0.00	-2.89	-0.15	---	---
	Horz. rgt. reinf.	72.93	-410.48	179.25	-4.66	8.21	-0.85	-0.82	---	---
	Vert. lft. reinf.	164.18	520.71	19.66	17.01	-10.95	-2.89	-0.15	---	---
	Horz. lft. reinf.	78.38	-410.48	179.25	-4.66	-8.21	-0.85	-0.82	---	---
	Concrete	34.38	-1395.06	-160.80	-43.05	-27.90	2.12	0.09	---	---
	Transve. reinf.	1.78	-801.11	-22.08	161.16	---	---	---	14.95	-11.09

Wall W13: Length: 107.8 cm [Initial node: 44.07;15.80 -> Final node: 45.15;15.80]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	89.34	386.35	103.61	-75.08	8.43	2.74	-0.92	---	---
	Horz. rgt. reinf.	99.69	420.84	124.11	-82.76	2.40	3.01	-1.18	---	---
	Vert. lft. reinf.	139.94	420.84	124.11	-82.76	0.00	3.01	-1.18	---	---
	Horz. lft. reinf.	80.83	420.84	124.11	-82.76	0.00	3.01	-1.18	---	---
	Concrete	17.91	-530.06	99.26	-7.81	10.60	0.17	-1.40	---	---
	Transve. reinf.	1.76	-197.78	8.63	-67.19	---	---	---	-10.73	14.81
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	251.14	202.08	236.14	-71.25	11.32	1.09	-0.48	---	---
	Horz. rgt. reinf.	171.18	239.58	278.26	-77.64	3.38	3.50	-1.00	---	---
	Vert. lft. reinf.	82.68	-37.11	3.51	-17.13	-37.22	-4.79	4.52	---	---
	Horz. lft. reinf.	130.13	235.32	277.91	-77.44	0.00	3.24	-0.95	---	---
	Concrete	17.99	-295.21	-19.72	6.72	44.67	5.63	-5.39	---	---
	Transve. reinf.	1.62	-392.94	12.18	9.56	---	---	---	-9.49	14.00
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	309.18	247.76	309.80	-99.22	12.93	1.08	-0.42	---	---
	Horz. rgt. reinf.	216.53	260.04	355.70	-103.13	3.20	4.18	-1.15	---	---
	Vert. lft. reinf.	161.82	65.43	19.58	-27.71	-35.50	-4.63	3.94	---	---
	Horz. lft. reinf.	172.95	254.83	354.47	-102.83	0.00	3.77	-1.04	---	---
	Concrete	26.31	-607.60	-57.59	24.99	44.53	5.69	-4.99	---	---
	Transve. reinf.	1.13	-393.42	-9.49	-75.65	---	---	---	-4.08	11.08
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	126.69	196.65	365.06	-105.00	12.39	0.80	-0.21	---	---
	Horz. rgt. reinf.	219.29	142.19	409.24	-99.51	4.47	4.16	-1.15	---	---
	Vert. lft. reinf.	144.16	210.82	31.31	-29.86	-28.07	-3.73	2.76	---	---
	Horz. lft. reinf.	187.59	147.23	392.96	-99.97	0.00	1.97	-0.52	---	---
	Concrete	31.23	-761.80	-69.87	33.03	48.04	6.24	-4.92	---	---
	Transve. reinf.	1.08	-509.84	-14.99	-79.51	---	---	---	-5.08	10.04
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	203.24	681.31	45.61	-29.03	0.00	-0.51	0.10	---	---
	Horz. rgt. reinf.	173.19	-80.32	348.28	-68.82	3.03	3.05	-0.77	---	---
	Vert. lft. reinf.	209.00	681.25	45.56	-29.10	-2.10	-0.55	0.10	---	---
	Horz. lft. reinf.	156.35	-32.99	334.58	-72.04	-0.66	0.48	0.19	---	---
	Concrete	32.09	-1279.76	-150.58	44.50	-25.60	1.10	-0.10	---	---
	Transve. reinf.	0.49	-779.68	12.71	-19.42	---	---	---	-4.93	1.14



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Wall W14: Length: 99.7 cm [Initial node: 47.50;15.80 -> Final node: 48.50;15.80]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
Floor 6 (t=30.0 cm)	Vert. rgt. reinf.	2.30	-13.11	-1.49	-12.41	-17.79	-4.28	0.76	---	---
	Horz. rgt. reinf.	0.77	-111.42	-57.00	-19.00	2.23	-1.60	-0.05	---	---
	Vert. lft. reinf.	4.15	-96.87	-7.07	-1.79	23.48	3.73	3.32	---	---
	Horz. lft. reinf.	0.51	-96.87	-7.07	-1.79	23.48	3.73	3.32	---	---
	Concrete	7.91	-96.87	-7.07	-1.79	23.48	3.73	3.32	---	---
	Transve. reinf.	1.46	-29.95	5.01	-10.91	---	---	---	-12.03	-9.45
techo (t=30.0 cm)	Vert. rgt. reinf.	189.54	278.29	207.12	102.71	0.00	1.76	-1.04	---	---
	Horz. rgt. reinf.	138.56	278.29	207.12	102.71	0.00	1.76	-1.04	---	---
	Vert. lft. reinf.	214.05	278.29	207.12	102.71	-4.22	1.76	-1.04	---	---
	Horz. lft. reinf.	137.93	278.29	207.12	102.71	-4.22	1.76	-1.04	---	---
	Concrete	11.91	-189.66	-9.85	-18.69	27.67	3.11	5.51	---	---
	Transve. reinf.	1.69	-140.18	12.12	15.53	---	---	---	-17.12	-4.17
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	9.05	-363.42	-162.14	1.37	-33.38	-3.69	1.77	---	---
	Horz. rgt. reinf.	3.13	-142.72	-121.07	-66.31	-22.26	-13.21	12.80	---	---
	Vert. lft. reinf.	163.39	-54.70	-71.06	-105.76	-16.15	-9.50	9.21	---	---
	Horz. lft. reinf.	95.18	-54.70	-71.06	-105.76	-16.15	-9.50	9.21	---	---
	Concrete	22.09	-98.33	-115.18	-122.11	-16.26	-9.82	9.62	---	---
	Transve. reinf.	6.66	-93.19	-100.58	-116.97	---	---	---	-24.30	65.37
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	107.23	174.66	213.66	32.26	0.00	0.58	-0.32	---	---
	Horz. rgt. reinf.	104.56	174.66	213.66	32.26	0.00	0.58	-0.32	---	---
	Vert. lft. reinf.	78.24	-162.15	-68.32	-42.82	-26.51	-15.74	15.15	---	---
	Horz. lft. reinf.	71.48	174.66	213.66	32.26	-1.13	0.58	-0.32	---	---
	Concrete	20.15	-235.67	-108.79	-56.70	-26.99	-16.09	15.55	---	---
	Transve. reinf.	4.82	-331.61	-131.77	38.02	---	---	---	-17.15	47.22
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	207.43	267.23	-0.03	9.99	3.12	0.01	-0.43	---	---
	Horz. rgt. reinf.	118.35	110.95	249.73	30.11	0.00	0.68	-0.26	---	---
	Vert. lft. reinf.	107.41	267.23	-0.03	9.99	0.00	0.01	-0.43	---	---
	Horz. lft. reinf.	79.79	110.95	249.73	30.11	-0.94	0.68	-0.26	---	---
	Concrete	23.95	-869.02	-7.01	-54.05	-17.38	0.19	0.38	---	---
	Transve. reinf.	5.08	-464.80	-133.02	64.22	---	---	---	-17.97	49.85
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	174.04	630.97	43.79	22.96	2.21	0.52	0.03	---	---
	Horz. rgt. reinf.	111.16	-104.93	250.49	22.11	2.10	0.96	-0.11	---	---
	Vert. lft. reinf.	168.89	630.97	43.79	22.96	0.00	0.52	0.03	---	---
	Horz. lft. reinf.	105.06	-104.93	250.49	22.11	-2.10	0.96	-0.11	---	---
	Concrete	31.68	-1004.20	-83.85	2.65	20.08	-0.12	0.33	---	---
	Transve. reinf.	3.77	-583.28	-123.48	34.81	---	---	---	-11.12	37.86

Wall W15: Length: 99.6 cm [Initial node: 46.20;15.00 -> Final node: 46.20;16.00]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
Floor 6 (t=30.0 cm)	Vert. rgt. reinf.	144.60	142.32	155.84	47.78	2.37	1.35	0.55	---	---
	Horz. rgt. reinf.	96.58	142.32	155.84	47.78	2.37	1.35	0.55	---	---
	Vert. lft. reinf.	2.97	-226.34	-222.99	-86.10	4.53	-3.65	-1.29	---	---
	Horz. lft. reinf.	2.16	-224.39	-222.58	-85.33	4.49	-3.55	-1.24	---	---
	Concrete	6.05	-226.34	-222.99	-86.10	-4.53	-3.65	-1.29	---	---
	Transve. reinf.	0.58	66.16	1.31	-17.51	---	---	---	2.82	5.40
techo (t=30.0 cm)	Vert. rgt. reinf.	173.30	286.29	160.66	62.83	3.86	-1.15	0.34	---	---



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Wall W15: Length: 99.6 cm [Initial node: 46.20;15.00 -> Final node: 46.20;16.00]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. rgt. reinf.	99.18	286.29	160.66	62.83	3.86	-1.15	0.34	---	---
	Vert. lft. reinf.	91.41	286.29	160.66	62.83	0.00	-1.15	0.34	---	---
	Horz. lft. reinf.	96.27	286.29	160.66	62.83	0.00	-1.15	0.34	---	---
	Concrete	12.94	-567.02	-330.33	-147.12	-11.34	-2.36	-1.56	---	---
	Transve. reinf.	2.45	-57.47	47.81	-22.53	---	---	---	0.39	-25.60
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	221.88	213.04	387.56	66.93	4.39	-2.63	0.52	---	---
	Horz. rgt. reinf.	186.87	213.04	387.56	66.93	4.39	-2.63	0.52	---	---
	Vert. lft. reinf.	197.05	214.31	378.24	66.41	0.00	-2.67	-0.05	---	---
	Horz. lft. reinf.	198.22	213.04	387.56	66.93	0.00	-2.63	0.52	---	---
	Concrete	12.52	-215.19	2.94	13.09	27.92	4.96	-3.56	---	---
	Transve. reinf.	1.40	-105.51	63.45	79.23	---	---	---	14.60	-1.77
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	196.93	157.33	488.66	69.59	5.36	-3.61	0.47	---	---
	Horz. rgt. reinf.	223.09	155.88	489.54	69.45	5.36	-3.62	0.46	---	---
	Vert. lft. reinf.	174.65	165.60	478.57	70.36	0.00	-3.51	-0.23	---	---
	Horz. lft. reinf.	241.58	155.88	489.54	69.45	0.00	-3.62	0.46	---	---
	Concrete	17.68	-342.95	7.67	11.16	34.01	6.15	-5.07	---	---
	Transve. reinf.	1.70	-242.05	68.20	104.97	---	---	---	17.59	-2.89
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	88.64	-0.65	531.80	49.91	5.52	-4.26	0.32	---	---
	Horz. rgt. reinf.	224.24	-0.65	531.80	49.91	5.52	-4.26	0.32	---	---
	Vert. lft. reinf.	74.13	13.07	518.83	51.65	0.00	-3.90	-0.34	---	---
	Horz. lft. reinf.	249.07	-0.65	531.80	49.91	-0.01	-4.26	0.32	---	---
	Concrete	21.93	-470.81	9.51	13.63	36.15	6.59	-5.85	---	---
	Transve. reinf.	1.14	-404.31	56.21	123.58	---	---	---	11.40	-3.53
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	124.06	707.54	75.11	-22.40	3.41	0.54	-0.27	---	---
	Horz. rgt. reinf.	177.59	-341.78	452.12	0.26	6.84	-3.82	-0.69	---	---
	Vert. lft. reinf.	76.06	707.54	75.11	-22.40	0.00	0.54	-0.27	---	---
	Horz. lft. reinf.	203.33	-341.78	452.12	0.26	6.84	-3.82	-0.69	---	---
	Concrete	28.80	-1161.30	-124.24	-36.24	-23.23	0.76	-0.07	---	---
	Transve. reinf.	0.85	-694.26	39.08	100.87	---	---	---	8.71	1.40

Wall W16: Length: 110.6 cm [Initial node: 46.20;10.55 -> Final node: 46.20;11.66]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
Floor 6 (t=30.0 cm)	Vert. rgt. reinf.	2.83	-216.37	-218.97	75.33	-4.33	-2.19	0.94	---	---
	Horz. rgt. reinf.	2.63	-216.37	-218.97	75.33	-4.33	-2.19	0.94	---	---
	Vert. lft. reinf.	3.43	-209.84	17.55	-3.81	4.20	0.13	0.49	---	---
	Horz. lft. reinf.	2.24	-216.37	-218.97	75.33	4.33	-2.19	0.94	---	---
	Concrete	7.21	-209.84	17.55	-3.81	4.20	0.13	0.49	---	---
	Transve. reinf.	0.98	-53.01	8.08	25.26	---	---	---	-10.08	1.92
techo (t=30.0 cm)	Vert. rgt. reinf.	110.65	266.66	163.68	-56.66	0.00	-0.38	0.45	---	---
	Horz. rgt. reinf.	91.85	266.66	163.68	-56.66	0.00	-0.38	0.45	---	---
	Vert. lft. reinf.	121.26	266.66	163.68	-56.66	-2.72	-0.38	0.45	---	---
	Horz. lft. reinf.	98.16	266.66	163.68	-56.66	-2.72	-0.38	0.45	---	---
	Concrete	11.61	-342.16	32.68	-1.27	6.84	0.18	0.51	---	---
	Transve. reinf.	1.87	-110.62	-0.71	12.41	---	---	---	-17.77	7.89
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	174.33	185.90	324.24	-61.03	0.11	0.42	-0.28	---	---
	Horz. rgt. reinf.	165.34	185.90	324.24	-61.03	0.11	0.42	-0.28	---	---
	Vert. lft. reinf.	184.62	177.66	327.74	-60.79	-3.02	-0.09	0.24	---	---



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Wall W16: Length: 110.6 cm [Initial node: 46.20;10.55 -> Final node: 46.20;11.66]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Horz. lft. reinf.	166.14	177.66	327.74	-60.79	-3.02	-0.09	0.24	---	---
	Concrete	16.26	-283.74	-23.53	1.85	-36.72	-3.48	0.47	---	---
	Transve. reinf.	2.48	-222.03	-6.61	7.36	---	---	---	-23.55	11.04
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	196.32	-73.12	-66.67	-29.05	41.12	6.37	2.63	---	---
	Horz. rgt. reinf.	202.27	144.41	413.50	-69.08	0.00	0.40	-0.25	---	---
	Vert. lft. reinf.	156.36	146.58	409.33	-68.76	-0.29	0.40	-0.25	---	---
	Horz. lft. reinf.	198.15	144.41	413.50	-69.08	-0.35	0.40	-0.25	---	---
	Concrete	20.31	-373.51	-33.32	6.69	-43.92	-4.25	0.55	---	---
	Transve. reinf.	3.33	-349.09	-12.28	-20.44	---	---	---	-32.08	13.68
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	112.09	-91.82	-64.21	-28.10	43.80	6.76	3.08	---	---
	Horz. rgt. reinf.	206.08	-18.93	458.93	-53.17	0.38	0.36	-0.23	---	---
	Vert. lft. reinf.	144.12	165.08	-2.57	19.59	-4.27	-0.34	1.03	---	---
	Horz. lft. reinf.	204.28	-18.93	458.93	-53.17	-0.60	0.36	-0.23	---	---
	Concrete	22.80	-531.76	-77.69	-28.00	-41.98	-6.67	-3.73	---	---
	Transve. reinf.	2.92	-471.86	-14.74	-46.28	---	---	---	-28.58	10.76
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	108.54	809.77	69.01	25.61	0.00	-1.32	-0.19	---	---
	Horz. rgt. reinf.	118.06	-445.87	278.19	0.80	-8.92	0.26	-0.33	---	---
	Vert. lft. reinf.	115.00	809.77	69.01	25.61	-5.12	-1.32	-0.19	---	---
	Horz. lft. reinf.	116.31	-445.87	278.19	0.80	8.92	0.26	-0.33	---	---
	Concrete	33.03	-1353.24	-151.20	-48.15	-27.06	1.20	0.20	---	---
	Transve. reinf.	0.67	-471.47	5.81	-61.44	---	---	---	6.94	0.39

Wall W17: Length: 99.6 cm [Initial node: 47.50;10.90 -> Final node: 48.50;10.90]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
Floor 6 (t=30.0 cm)	Vert. rgt. reinf.	2.54	-38.29	-7.09	12.19	-16.87	-3.09	-2.81	---	---
	Horz. rgt. reinf.	0.44	-38.29	-7.09	12.19	-16.87	-3.09	-2.81	---	---
	Vert. lft. reinf.	2.62	-31.37	-3.19	9.55	18.28	4.05	-0.80	---	---
	Horz. lft. reinf.	0.75	-94.15	-49.88	-17.20	-1.88	2.20	0.55	---	---
	Concrete	4.68	-31.37	-3.19	9.55	18.28	4.05	-0.80	---	---
	Transve. reinf.	1.05	-34.49	1.74	-10.98	---	---	---	8.91	6.43
techo (t=30.0 cm)	Vert. rgt. reinf.	245.91	276.39	215.57	104.91	0.00	-1.80	-1.07	---	---
	Horz. rgt. reinf.	137.03	276.39	215.57	104.91	0.00	-1.80	-1.07	---	---
	Vert. lft. reinf.	272.74	276.39	215.57	104.91	-2.69	-1.80	-1.07	---	---
	Horz. lft. reinf.	160.11	261.91	220.84	99.16	-3.33	-2.67	-1.37	---	---
	Concrete	10.09	276.39	215.57	104.91	-2.69	-1.80	-1.07	---	---
	Transve. reinf.	1.36	-99.40	6.62	6.73	---	---	---	-11.41	-8.60
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	292.66	308.56	420.49	130.74	0.00	0.58	-1.29	---	---
	Horz. rgt. reinf.	234.89	308.56	420.49	130.74	0.00	0.58	-1.29	---	---
	Vert. lft. reinf.	326.57	308.56	420.49	130.74	-3.88	0.58	-1.29	---	---
	Horz. lft. reinf.	252.77	286.37	429.54	121.62	-6.09	-1.68	-2.27	---	---
	Concrete	12.30	308.56	420.49	130.74	-3.88	0.58	-1.29	---	---
	Transve. reinf.	3.23	-322.61	-112.60	-1.03	---	---	---	-21.03	-26.53
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	336.71	336.49	569.90	156.91	0.00	1.92	-0.97	---	---
	Horz. rgt. reinf.	311.48	336.49	569.90	156.91	0.00	1.92	-0.97	---	---
	Vert. lft. reinf.	363.62	336.49	569.90	156.91	-3.37	1.92	-0.97	---	---
	Horz. lft. reinf.	313.16	290.98	579.72	139.98	-5.39	-0.26	-1.88	---	---
	Concrete	16.26	-609.78	-515.82	-259.58	-12.20	-11.39	-2.78	---	---



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Wall W17: Length: 99.6 cm [Initial node: 47.50;10.90 -> Final node: 48.50;10.90]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
	Transve. reinf.	3.71	-435.15	-154.03	1.55	---	---	---	-24.30	-30.30
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	208.00	269.28	662.99	148.22	0.00	2.72	-0.72	---	---
	Horz. rgt. reinf.	337.01	269.28	662.99	148.22	0.00	2.72	-0.72	---	---
	Vert. lft. reinf.	224.77	271.16	650.84	147.63	-3.46	2.97	-0.84	---	---
	Horz. lft. reinf.	327.66	203.80	671.77	124.67	-4.91	0.52	-1.62	---	---
	Concrete	20.03	-568.20	-38.16	111.05	-11.36	5.44	1.41	---	---
	Transve. reinf.	3.57	-529.27	-275.81	-14.88	---	---	---	-18.80	-32.27
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	120.67	570.43	32.96	24.16	3.01	0.80	0.07	---	---
	Horz. rgt. reinf.	270.59	-8.08	599.27	63.61	0.16	2.28	-0.39	---	---
	Vert. lft. reinf.	115.11	570.43	32.96	24.16	0.00	0.80	0.07	---	---
	Horz. lft. reinf.	263.75	-101.20	609.57	31.83	-3.68	-0.29	-1.33	---	---
	Concrete	27.46	-1100.58	-117.61	-41.52	22.01	-0.54	0.07	---	---
	Transve. reinf.	3.35	-476.58	-242.88	-54.46	---	---	---	-17.28	-30.11

Wall W19: Length: 160.1 cm [Initial node: 44.30;9.82 -> Final node: 44.30;11.42]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	177.20	-21.66	-44.33	20.36	31.29	3.22	-0.09	---	---
	Horz. rgt. reinf.	20.53	-23.99	-58.61	-31.93	22.70	4.22	-0.37	---	---
	Vert. lft. reinf.	5.08	-311.35	-32.27	-1.02	6.23	-1.04	-0.89	---	---
	Horz. lft. reinf.	6.04	-382.72	-495.69	187.80	-7.65	6.09	-2.46	---	---
	Concrete	12.14	-382.72	-495.69	187.80	7.65	6.09	-2.46	---	---
	Transve. reinf.	1.86	-154.10	12.79	9.65	---	---	---	19.51	0.80
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	201.07	245.07	131.40	55.76	0.03	0.48	0.37	---	---
	Horz. rgt. reinf.	93.56	244.15	134.42	56.61	0.01	0.48	0.37	---	---
	Vert. lft. reinf.	197.29	245.07	131.40	55.76	0.00	0.48	0.37	---	---
	Horz. lft. reinf.	87.62	240.91	134.97	56.44	-0.05	0.45	0.36	---	---
	Concrete	13.94	-607.43	-369.11	-177.62	-12.15	1.27	0.33	---	---
	Transve. reinf.	1.57	-241.78	6.86	37.56	---	---	---	16.48	0.57
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	264.33	274.82	322.37	114.98	0.00	0.22	0.28	---	---
	Horz. rgt. reinf.	193.25	274.82	322.37	114.98	0.00	0.22	0.28	---	---
	Vert. lft. reinf.	264.61	274.82	322.37	114.98	-0.61	0.22	0.28	---	---
	Horz. lft. reinf.	189.98	274.82	322.37	114.98	-0.61	0.22	0.28	---	---
	Concrete	21.40	-597.41	-7.47	-137.36	-11.95	-1.36	-0.77	---	---
	Transve. reinf.	1.71	-321.34	-25.63	32.63	---	---	---	17.87	-1.67
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	116.22	198.82	468.48	156.64	0.00	-0.01	0.15	---	---
	Horz. rgt. reinf.	208.39	198.82	468.48	156.64	0.00	-0.01	0.15	---	---
	Vert. lft. reinf.	118.01	198.82	468.48	156.64	-1.17	-0.01	0.15	---	---
	Horz. lft. reinf.	207.98	198.82	468.48	156.64	-1.17	-0.01	0.15	---	---
	Concrete	28.89	-1029.70	-21.54	-196.32	-20.59	0.04	-0.54	---	---
	Transve. reinf.	2.06	-546.99	3.40	-80.16	---	---	---	21.30	0.06
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	138.48	1150.00	95.90	54.95	0.00	-0.20	0.02	---	---
	Horz. rgt. reinf.	125.80	-206.83	470.25	132.47	4.14	-0.42	-0.19	---	---
	Vert. lft. reinf.	139.67	1150.00	95.90	54.95	-1.16	-0.20	0.02	---	---
	Horz. lft. reinf.	127.88	-206.83	470.25	132.47	-4.14	-0.42	-0.19	---	---
	Concrete	43.69	-1798.08	-184.54	-87.30	35.96	-0.24	0.03	---	---
	Transve. reinf.	1.19	-495.71	-133.48	84.91	---	---	---	-10.04	-7.21



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Wall W20: Length: 101.6 cm [Initial node: 44.30;7.61 -> Final node: 44.30;8.62]										
Floor	Code checks	Usage (%)	Worst case							
			Nx (kN/m)	Ny (kN/m)	Nxy (kN/m)	Mx (kN·m/m)	My (kN·m/m)	Mxy (kN·m/m)	Qx (kN/m)	Qy (kN/m)
techo (t=30.0 cm)	Vert. rgt. reinf.	203.92	599.63	176.72	-135.40	0.00	1.55	-0.67	---	---
	Horz. rgt. reinf.	77.56	599.63	176.72	-135.40	0.00	1.55	-0.67	---	---
	Vert. lft. reinf.	205.96	599.63	176.72	-135.40	-0.27	1.55	-0.67	---	---
	Horz. lft. reinf.	115.23	599.63	176.72	-135.40	-0.27	1.55	-0.67	---	---
	Concrete	26.65	-8.88	10.10	-243.23	2.55	0.50	-0.39	---	---
	Transve. reinf.	0.59	-46.03	28.76	-258.64	---	---	---	-3.47	4.93
Floor 4 (t=30.0 cm)	Vert. rgt. reinf.	319.11	481.49	368.81	-157.67	0.00	1.35	-0.55	---	---
	Horz. rgt. reinf.	172.95	481.07	370.15	-157.97	0.00	1.36	-0.56	---	---
	Vert. lft. reinf.	327.39	481.49	368.81	-157.67	-1.22	1.35	-0.55	---	---
	Horz. lft. reinf.	227.07	481.07	370.15	-157.97	-1.21	1.36	-0.56	---	---
	Concrete	25.66	-93.73	0.44	-234.73	3.02	0.73	-0.37	---	---
	Transve. reinf.	0.70	-364.96	28.97	-189.31	---	---	---	-5.28	5.06
Floor 3 (t=30.0 cm)	Vert. rgt. reinf.	227.93	585.25	524.14	-218.70	0.00	1.49	-0.63	---	---
	Horz. rgt. reinf.	156.81	585.25	524.14	-218.70	0.00	1.49	-0.63	---	---
	Vert. lft. reinf.	238.20	585.25	524.14	-218.70	-1.20	1.49	-0.63	---	---
	Horz. lft. reinf.	252.72	585.25	524.14	-218.70	-1.20	1.49	-0.63	---	---
	Concrete	29.48	-9.93	-19.79	-268.00	2.28	0.55	-0.53	---	---
	Transve. reinf.	0.73	-669.63	20.37	-190.02	---	---	---	-5.48	5.07
Floor 2 (t=30.0 cm)	Vert. rgt. reinf.	94.37	607.03	609.62	-251.00	0.00	1.30	-0.59	---	---
	Horz. rgt. reinf.	143.21	548.83	641.16	-249.15	0.00	1.34	-0.58	---	---
	Vert. lft. reinf.	148.60	607.03	609.62	-251.00	-0.53	1.30	-0.59	---	---
	Horz. lft. reinf.	242.75	548.83	641.16	-249.15	-1.60	1.34	-0.58	---	---
	Concrete	41.35	-1538.30	41.61	70.01	30.77	1.46	1.26	---	---
	Transve. reinf.	0.80	-978.28	14.68	-185.65	---	---	---	-6.57	4.94
Floor 1 (t=30.0 cm)	Vert. rgt. reinf.	184.28	1083.88	76.92	-52.51	0.71	0.20	-0.04	---	---
	Horz. rgt. reinf.	212.00	315.39	554.47	-209.03	0.00	1.10	-0.47	---	---
	Vert. lft. reinf.	183.12	1083.88	76.92	-52.51	0.00	0.20	-0.04	---	---
	Horz. lft. reinf.	205.33	315.39	554.47	-209.03	-0.56	1.10	-0.47	---	---
	Concrete	51.84	-1931.88	46.66	124.77	-38.64	0.35	0.69	---	---
	Transve. reinf.	0.40	-1413.72	-79.07	-127.26	---	---	---	-2.75	3.02

6.- BASEMENT WALLS REINFORCEMENT REPORT

Wall W1: Length: 136.918 cm [Initial node: 13.97;10.00 -> Final node: 15.34;10.00]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.7	---
Floor 4	30.0	Ø10@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.2	---
Floor 3	30.0	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.5	---
Floor 2	30.0	Ø8@10 cm	Ø10@10 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.5	---
Floor 1	30.0	Ø16@30 cm	Ø16@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.6	---

Wall W2: Length: 138.079 cm [Initial node: 13.97;20.00 -> Final node: 15.35;20.00]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø6@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---
Floor 4	30.0	Ø6@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.1	---
Floor 3	30.0	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.6	---
Floor 2	30.0	Ø16@25 cm	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.1	---
Floor 1	30.0	Ø16@20 cm	Ø16@20 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	98.1	---



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Wall W3: Length: 99.9 cm [Initial node: 14.13;11.17 -> Final node: 14.13;12.17]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.7	---
Floor 4	30.0	Ø10@25 cm	Ø10@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 3	30.0	Ø12@30 cm	Ø12@30 cm	Ø12@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 2	30.0	Ø16@30 cm	Ø16@30 cm	Ø16@30 cm	Ø12@30 cm	---	---	---	---	93.9	---
Floor 1	30.0	Ø16@20 cm	Ø16@20 cm	Ø16@25 cm	Ø12@25 cm	---	---	---	---	92.3	---

Wall W7: Length: 99.9 cm [Initial node: 14.93;11.17 -> Final node: 14.93;12.17]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.7	---
Floor 4	30.0	Ø8@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 3	30.0	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	Ø12@25 cm	---	---	---	---	93.9	---
Floor 2	30.0	Ø16@30 cm	Ø16@30 cm	Ø12@30 cm	Ø16@30 cm	---	---	---	---	93.9	---
Floor 1	30.0	Ø16@20 cm	Ø16@20 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	92.3	---

Wall W8: Length: 99.7 cm [Initial node: 14.93;13.20 -> Final node: 14.93;14.20]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø16@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.7	---
Floor 4	30.0	Ø12@25 cm	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	---	---	---	---	91.0	---
Floor 3	30.0	Ø16@30 cm	Ø16@30 cm	Ø16@25 cm	Ø12@25 cm	---	---	---	---	91.0	---
Floor 2	30.0	Ø12@15 cm	Ø16@15 cm	Ø12@20 cm	Ø12@20 cm	---	---	---	---	93.6	---
Floor 1	30.0	Ø25@25 cm	Ø20@25 cm	Ø12@20 cm	Ø16@20 cm	---	---	---	---	92.3	---

Wall W9: Length: 99.9 cm [Initial node: 14.93;15.80 -> Final node: 14.93;16.80]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.3	---
Floor 4	30.0	Ø16@30 cm	Ø16@30 cm	Ø8@10 cm	Ø8@10 cm	---	---	---	---	94.5	---
Floor 3	30.0	Ø12@15 cm	Ø16@15 cm	Ø12@15 cm	Ø12@15 cm	---	---	---	---	94.5	---
Floor 2	30.0	Ø16@30 cm	Ø16@30 cm	Ø16@25 cm	Ø20@25 cm	---	---	---	---	94.8	---
Floor 1	30.0	Ø12@10 cm	Ø12@10 cm	Ø16@30 cm	Ø20@30 cm	---	---	---	---	92.3	---

Wall W10: Length: 99.8 cm [Initial node: 14.93;17.84 -> Final node: 14.93;18.84]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 4	30.0	Ø16@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	98.3	---
Floor 3	30.0	Ø12@25 cm	Ø12@25 cm	Ø12@30 cm	Ø12@30 cm	---	---	---	---	98.3	---
Floor 2	30.0	Ø8@10 cm	Ø8@10 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	93.3	---
Floor 1	30.0	Ø16@20 cm	Ø16@20 cm	Ø12@25 cm	Ø16@25 cm	---	---	---	---	90.6	---

Wall W4: Length: 99.5 cm [Initial node: 14.13;13.21 -> Final node: 14.13;14.20]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.5	---
Floor 4	30.0	Ø12@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.1	---
Floor 3	30.0	Ø12@25 cm	Ø12@25 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	90.1	---
Floor 2	30.0	Ø12@20 cm	Ø12@20 cm	Ø8@10 cm	Ø8@10 cm	---	---	---	---	90.1	---
Floor 1	30.0	Ø20@25 cm	Ø20@25 cm	Ø12@20 cm	Ø12@20 cm	---	---	---	---	92.3	---

Wall W5: Length: 99.5 cm [Initial node: 14.13;15.80 -> Final node: 14.13;16.80]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø12@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.2	---
Floor 4	30.0	Ø16@25 cm	Ø12@25 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	91.0	---
Floor 3	30.0	Ø16@20 cm	Ø12@20 cm	Ø12@20 cm	Ø12@20 cm	---	---	---	---	91.0	---
Floor 2	30.0	Ø16@20 cm	Ø16@20 cm	Ø12@20 cm	Ø12@20 cm	---	---	---	---	93.6	---
Floor 1	30.0	Ø16@10 cm	Ø12@10 cm	Ø8@10 cm	Ø8@10 cm	---	---	---	---	92.3	---

Wall W6: Length: 100.2 cm [Initial node: 14.13;17.84 -> Final node: 14.13;18.84]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 4	30.0	Ø12@30 cm	Ø16@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.4	---
Floor 3	30.0	Ø8@10 cm	Ø8@10 cm	Ø12@30 cm	Ø16@30 cm	---	---	---	---	90.3	---
Floor 2	30.0	Ø12@20 cm	Ø12@20 cm	Ø8@10 cm	Ø8@10 cm	---	---	---	---	95.0	---
Floor 1	30.0	Ø12@10 cm	Ø12@10 cm	Ø8@10 cm	Ø8@10 cm	---	---	---	---	90.4	---



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Wall W39: Length: 99.9 cm [Initial node: 16.48;14.02 -> Final node: 17.48;14.02]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø8@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.6	---
Floor 4	30.0	Ø6@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.4	---
Floor 3	30.0	Ø12@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.4	---
Floor 2	30.0	Ø12@20 cm	Ø12@20 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.4	---
Floor 1	30.0	Ø12@15 cm	Ø12@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W41: Length: 128.182 cm [Initial node: 19.00;16.50 -> Final node: 20.28;16.50]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø12@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.9	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.9	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.9	---
Floor 2	30.0	Ø12@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.6	---
Floor 1	30.0	Ø16@30 cm	Ø16@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W42: Length: 128.2 cm [Initial node: 19.00;14.02 -> Final node: 20.28;14.02]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø10@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.9	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.9	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.9	---
Floor 2	30.0	Ø12@30 cm	Ø16@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.7	---
Floor 1	30.0	Ø16@30 cm	Ø16@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W43: Length: 100.2 cm [Initial node: 20.00;17.30 -> Final node: 20.00;18.30]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.9	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 3	30.0	Ø8@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 2	30.0	Ø12@25 cm	Ø12@25 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	93.9	---
Floor 1	30.0	Ø16@20 cm	Ø16@20 cm	Ø12@30 cm	Ø12@30 cm	---	---	---	---	92.3	---

Wall W44: Length: 100.8 cm [Initial node: 20.00;11.70 -> Final node: 20.00;12.71]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø8@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.0	---
Floor 4	30.0	Ø8@10 cm	Ø8@10 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.0	---
Floor 3	30.0	Ø16@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.0	---
Floor 2	30.0	Ø6@10 cm	Ø6@10 cm	Ø12@30 cm	Ø12@30 cm	---	---	---	---	92.7	---
Floor 1	30.0	Ø16@20 cm	Ø16@20 cm	Ø16@30 cm	Ø12@30 cm	---	---	---	---	91.1	---

Wall W45: Length: 99.9 cm [Initial node: 16.48;16.50 -> Final node: 17.48;16.50]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø12@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.6	---
Floor 4	30.0	Ø8@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.4	---
Floor 3	30.0	Ø12@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.4	---
Floor 2	30.0	Ø12@20 cm	Ø12@20 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.4	---
Floor 1	30.0	Ø12@15 cm	Ø12@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W47: Length: 99.2 cm [Initial node: 35.90;13.21 -> Final node: 35.90;14.20]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø8@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.5	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.8	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.3	---
Floor 2	30.0	Ø6@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.3	---
Floor 1	30.0	Ø12@25 cm	Ø16@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W49: Length: 100.5 cm [Initial node: 35.90;15.80 -> Final node: 35.90;16.80]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø10@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	96.6	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	98.8	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.5	---
Floor 2	30.0	Ø6@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.8	---
Floor 1	30.0	Ø12@25 cm	Ø16@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---



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Wall W50: Length: 137 cm [Initial node: 34.68;20.00 -> Final node: 36.05;20.00]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.1	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	100.0	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.8	---
Floor 2	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.9	---
Floor 1	30.0	Ø12@20 cm	Ø16@20 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.6	---

Wall W51: Length: 180.8 cm [Initial node: 34.68;10.00 -> Final node: 36.48;10.00]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø10@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.5	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.7	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	100.0	---
Floor 2	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	99.3	---
Floor 1	30.0	Ø8@10 cm	Ø8@10 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.6	---

Wall W54: Length: 99.2 cm [Initial node: 35.00;13.21 -> Final node: 35.00;14.20]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø8@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.8	---
Floor 4	30.0	Ø8@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.4	---
Floor 3	30.0	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	96.9	---
Floor 2	30.0	Ø12@25 cm	Ø16@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.5	---
Floor 1	30.0	Ø16@30 cm	Ø16@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W55: Length: 100 cm [Initial node: 35.00;15.80 -> Final node: 35.00;16.80]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø8@20 cm	Ø10@20 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.1	---
Floor 4	30.0	Ø8@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.1	---
Floor 3	30.0	Ø10@20 cm	Ø8@20 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.1	---
Floor 2	30.0	Ø8@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.9	---
Floor 1	30.0	Ø16@30 cm	Ø20@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W56: Length: 140.4 cm [Initial node: 29.57;14.03 -> Final node: 30.97;14.03]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.9	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.3	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.5	---
Floor 2	30.0	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.5	---
Floor 1	30.0	Ø16@25 cm	Ø16@25 cm	Ø12@30 cm	Ø12@30 cm	1	Ø10	30	25	92.3	---

Wall W57: Length: 142.3 cm [Initial node: 29.55;16.50 -> Final node: 30.97;16.50]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø6@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.0	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.5	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.5	---
Floor 2	30.0	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.5	---
Floor 1	30.0	Ø16@25 cm	Ø16@25 cm	Ø8@15 cm	Ø10@15 cm	1	Ø10	15	50	92.3	---

Wall W58: Length: 99.4 cm [Initial node: 32.49;16.50 -> Final node: 33.49;16.50]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø10@25 cm	Ø10@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.0	---
Floor 4	30.0	Ø8@10 cm	Ø8@10 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	94.3	---
Floor 3	30.0	Ø8@10 cm	Ø8@10 cm	Ø12@20 cm	Ø16@20 cm	---	---	---	---	95.1	---
Floor 2	30.0	Ø12@30 cm	Ø12@30 cm	Ø12@20 cm	Ø16@20 cm	---	---	---	---	95.1	---
Floor 1	30.0	Ø12@15 cm	Ø12@15 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	92.3	---

Wall W59: Length: 99.6 cm [Initial node: 32.49;14.02 -> Final node: 33.49;14.02]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø6@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.7	---
Floor 4	30.0	Ø8@10 cm	Ø8@10 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	95.1	---
Floor 3	30.0	Ø8@10 cm	Ø8@10 cm	Ø12@20 cm	Ø12@20 cm	---	---	---	---	95.1	---
Floor 2	30.0	Ø12@25 cm	Ø12@25 cm	Ø12@20 cm	Ø12@20 cm	---	---	---	---	95.1	---
Floor 1	30.0	Ø12@15 cm	Ø12@15 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	92.3	---



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Wall W11: Length: 99.9 cm [Initial node: 47.50;20.00 -> Final node: 48.50;20.00]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø6@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	95.4	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 2	30.0	Ø12@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.9	---
Floor 1	30.0	Ø8@10 cm	Ø8@10 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W12: Length: 100.4 cm [Initial node: 44.25;19.25 -> Final node: 44.25;20.25]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.4	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.2	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.2	---
Floor 2	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.2	---
Floor 1	30.0	Ø8@10 cm	Ø10@10 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.0	---

Wall W13: Length: 107.8 cm [Initial node: 44.07;15.80 -> Final node: 45.15;15.80]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø12@25 cm	Ø16@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.3	---
Floor 4	30.0	Ø10@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.6	---
Floor 3	30.0	Ø8@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.8	---
Floor 2	30.0	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.5	---
Floor 1	30.0	Ø12@25 cm	Ø12@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.0	---

Wall W14: Length: 99.7 cm [Initial node: 47.50;15.80 -> Final node: 48.50;15.80]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
Floor 6	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	100.0	---
techo	30.0	Ø8@20 cm	Ø8@20 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	89.9	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	94.5	---
Floor 3	30.0	Ø10@20 cm	Ø8@20 cm	Ø12@25 cm	Ø10@25 cm	---	---	---	---	90.1	---
Floor 2	30.0	Ø8@15 cm	Ø6@15 cm	Ø12@25 cm	Ø10@25 cm	---	---	---	---	90.1	---
Floor 1	30.0	Ø8@10 cm	Ø8@10 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.7	---

Wall W15: Length: 99.6 cm [Initial node: 46.20;15.00 -> Final node: 46.20;16.00]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
Floor 6	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	96.0	---
techo	30.0	Ø8@10 cm	Ø6@10 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.6	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	96.8	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	96.8	---
Floor 2	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	96.8	---
Floor 1	30.0	Ø20@25 cm	Ø16@25 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	90.2	---

Wall W16: Length: 110.6 cm [Initial node: 46.20;10.55 -> Final node: 46.20;11.66]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
Floor 6	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	100.0	---
techo	30.0	Ø12@30 cm	Ø12@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	96.8	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.5	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.5	---
Floor 2	30.0	Ø6@15 cm	Ø8@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	91.6	---
Floor 1	30.0	Ø16@20 cm	Ø16@20 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W17: Length: 99.6 cm [Initial node: 47.50;10.90 -> Final node: 48.50;10.90]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
Floor 6	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	100.0	---
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.4	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.5	---
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.5	---
Floor 2	30.0	Ø6@10 cm	Ø6@10 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.5	---
Floor 1	30.0	Ø16@30 cm	Ø16@30 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	92.3	---

Wall W19: Length: 160.1 cm [Initial node: 44.30;9.82 -> Final node: 44.30;11.42]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spig (cm)	Hor.spig (cm)		
techo	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.7	---
Floor 4	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.5	---



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Wall W19: Length: 160.1 cm [Initial node: 44.30;9.82 -> Final node: 44.30;11.42]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
Floor 3	30.0	Ø6@15 cm	Ø6@15 cm	Ø10@25 cm	Ø10@25 cm	---	---	---	---	93.5	---
Floor 2	30.0	Ø12@25 cm	Ø12@25 cm	Ø12@30 cm	Ø12@30 cm	---	---	---	---	91.8	---
Floor 1	30.0	Ø12@10 cm	Ø12@10 cm	Ø12@20 cm	Ø12@20 cm	---	---	---	---	93.3	---

Wall W20: Length: 101.6 cm [Initial node: 44.30;7.61 -> Final node: 44.30;8.62]											
Floor	Thickness (cm)	Vertical reinf.		Horizontal reinf.		Transverse reinforcement				C.F. (%)	Status
		Left	Right	Left	Right	Crossties	Dia.	Ver.spg (cm)	Hor.spg (cm)		
techo	30.0	Ø12@25 cm	Ø12@25 cm	Ø12@30 cm	Ø16@30 cm	---	---	---	---	91.5	---
Floor 4	30.0	Ø8@20 cm	Ø8@20 cm	Ø10@25 cm	Ø12@25 cm	---	---	---	---	90.6	---
Floor 3	30.0	Ø12@25 cm	Ø12@25 cm	Ø12@30 cm	Ø16@30 cm	---	---	---	---	90.6	---
Floor 2	30.0	Ø16@25 cm	Ø20@25 cm	Ø12@25 cm	Ø16@25 cm	---	---	---	---	90.6	---
Floor 1	30.0	Ø16@25 cm	Ø16@25 cm	Ø12@25 cm	Ø12@25 cm	---	---	---	---	92.0	---

C.F. = The compliance factor indicates the percentage area in which the reinforcement and the concrete thickness are adequate.

7.- COLUMN TAKEOFF REPORT

Takeoff summary - Floor 1										
Columns	Dimensions (cm)	Formwork (m²)	Concrete H-20 (m³)	Reinforcement ADN 420						Steel area (kg/m³)
				Longitudinal				Stirrups Ø8 (kg)	Total +10 % (kg)	
				Ø20 (kg)	Ø25 (kg)	Ø16 (kg)	Ø12 (kg)			
C1, C6, C7, C9, C10, C12, C13, C15, C17 and C25	50x50	48.00	6.00	829.0	-	-	-	102.0	1024.1	155.17
C2	50x50	4.80	0.60	-	67.8	71.1	-	20.7	175.6	266.00
C3	50x50	4.80	0.60	124.4	-	-	-	23.5	162.7	246.50
C4	50x50	4.80	0.60	-	141.8	-	-	7.9	164.7	249.50
C5	50x50	4.80	0.60	41.4	-	-	40.1	27.1	119.5	181.00
C8	40x30	3.50	0.30	-	141.8	-	-	7.3	164.0	497.00
C11	40x30	3.50	0.30	88.8	-	10.7	-	11.6	122.2	370.33
C14, C16, C19, C20, C22, C23, C24, C26, C27, C28, C29 and C30	50x50	60.00	7.56	994.8	-	-	-	122.4	1228.9	147.78
C18	40x30	3.50	0.30	85.6	-	-	-	9.4	104.5	316.67
C21	30x30	3.00	0.23	68.1	61.7	-	-	15.3	159.6	630.87
Total		140.70	17.09	2232.1	413.1	81.8	40.1	347.2	3425.8	182.23

Takeoff summary - Floor 2										
Columns	Dimensions (cm)	Formwork (m²)	Concrete H-20 (m³)	Reinforcement ADN 420						Steel area (kg/m³)
				Longitudinal			Stirrups		Total +10 % (kg)	
				Ø20 (kg)	Ø12 (kg)	Ø25 (kg)	Ø8 (kg)	Ø6 (kg)		
C1, C5, C6, C7, C9, C10, C12, C13, C15, C17 and C25	50x50	52.80	6.60	911.9	-	-	112.2	-	1126.5	155.17
C2	50x50	4.80	0.60	41.4	65.3	-	37.7	-	158.8	240.67
C3 and C4	50x50	9.60	1.20	82.8	-	135.6	20.4	-	262.7	199.00
C8	40x30	3.50	0.30	77.5	-	-	11.7	-	98.1	297.33
C11	40x30	3.50	0.30	39.0	7.0	-	11.5	-	63.3	191.67
C14, C16, C19, C20, C22, C23, C24, C26, C27, C28, C29 and C30	50x50	60.00	7.56	994.8	-	-	122.4	-	1228.9	147.78
C18	40x30	3.50	0.30	-	36.4	-	-	10.0	51.0	154.67
C21	30x30	3.00	0.23	-	-	55.5	4.7	-	66.2	261.74
Total		140.70	17.09	2147.4	108.7	191.1	320.6	10.0	3055.5	162.54

Takeoff summary - Floor 3										
Columns	Dimensions (cm)	Formwork (m²)	Concrete H-20 (m³)	Reinforcement ADN 420						Steel area (kg/m³)
				Longitudinal			Stirrups		Total +10 % (kg)	
				Ø20 (kg)	Ø16 (kg)	Ø12 (kg)	Ø8 (kg)	Ø6 (kg)		
C1, C2, C3, C4, C5, C6, C7, C9, C12, C13, C15, C17 and C25	50x50	62.40	7.80	1077.7	-	-	132.6	-	1331.3	155.17
C8 and C11	40x30	7.00	0.60	-	74.8	-	-	9.6	92.8	140.67
C10	50x50	4.80	0.60	82.9	-	-	13.4	-	105.9	160.50
C14, C16, C19, C20, C22, C23, C24, C26, C27, C28, C29 and C30	50x50	60.00	7.56	994.8	-	-	122.4	-	1228.9	147.78
C18	40x30	3.50	0.30	-	34.6	-	-	4.8	43.3	131.33
C21	30x30	3.00	0.23	-	-	26.3	-	5.4	34.9	137.83
Total		140.70	17.09	2155.4	109.4	26.3	268.4	19.8	2837.1	150.92



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Takeoff summary - Floor 4											
Columns	Dimensions (cm)	Formwork (m ²)	Concrete H-20 (m ³)	Reinforcement ADN 420						Steel area (kg/m ³)	
				Longitudinal			Stirrups		Total +10 % (kg)		
				Ø20 (kg)	Ø16 (kg)	Ø12 (kg)	Ø8 (kg)	Ø6 (kg)			
C1, C2, C3, C4 and C10	50x50	24.00	3.00	414.5	-	-	67.0	-	529.7	160.50	
C5, C6, C7, C9, C12, C13, C15, C17 and C25	50x50	43.20	5.40	746.1	-	-	91.8	-	921.7	155.17	
C8	40x30	3.50	0.30	-	34.6	-	-	4.8	43.3	131.33	
C11 and C18	40x30	7.00	0.60	-	74.8	-	-	9.6	92.8	140.67	
C14, C16, C19, C20, C22, C23, C24, C26, C27, C28, C29 and C30	50x50	60.00	7.56	994.8	-	-	122.4	-	1228.9	147.78	
C21	30x30	3.00	0.23	-	-	24.9	-	5.4	33.3	131.74	
Total			140.70	17.09	2155.4	109.4	24.9	281.2	19.8	2849.7	151.59

Takeoff summary - techo										
Columns	Dimensions (cm)	Formwork (m²)	Concrete H-20 (m³)	Reinforcement ADN 420						Steel area (kg/m³)
				Longitudinal			Stirrups		Total +10 % (kg)	
				Ø20 (kg)	Ø16 (kg)	Ø12 (kg)	Ø8 (kg)	Ø6 (kg)		
C1, C2, C3, C4, C5, C6 and C10	50x50	33.60	4.20	411.6	-	-	93.8	-	555.9	120.33
C7, C9, C12, C13, C15, C16, C17, C19, C23 and C25	50x50	48.00	6.00	588.0	-	-	102.0	-	759.0	115.00
C8	40x30	3.36	0.29	-	28.2	-	-	4.8	36.3	113.79
C11 and C18	40x30	7.00	0.60	-	56.4	-	-	9.6	72.6	110.00
C14, C20, C22, C24, C26, C27, C28, C29 and C30	50x50	45.00	5.67	529.2	-	-	91.8	-	683.1	109.52
C21	30x30	3.00	0.23	-	-	21.2	-	5.4	29.3	115.65
Total		139.96	16.99	1528.8	84.6	21.2	287.6	19.8	2136.2	114.30

8.- SUM OF THE FORCES OF THE COLUMNS, SHEAR WALLS AND WALLS BY LOADCASE AND FLOOR

- Only the forces of the columns, walls and shear walls are taken into account, hence if the job contains beams with external fixity, sloped beams, ties or integrated 3D structures. the forces of these elements are not displayed in the following report.
- This report is useful to know which forces act above the base elevation of the supports on a floor, and so in the case of columns starting on a beam, which are in tension, the forces of these columns will be influenced not only by loads acting from above, but also from those they receive from floors below.

8.1.- Summarised



Column, shear wall and wall forces and reinforcement

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Values referred to the origin (X=0.00, Y=0.00)								
Floor	Elevation (m)	Loadcase	N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
techo	15.00	Self weight	136.9	6460.8	1823.7	0.0	-0.0	0.0
		Dead load	1.3	60.1	17.0	-0.0	-0.0	-0.0
		Live load	12.7	601.3	170.2	0.0	0.0	0.0
		Wind +X ecc.+	0.0	5.0	-0.0	2.2	-0.0	-30.0
		Wind +X ecc.-	0.0	5.0	0.0	2.2	-0.0	-27.6
		Wind -X ecc.+	-0.0	-5.0	0.0	-2.2	0.0	30.0
		Wind -X ecc.-	-0.0	-5.0	-0.0	-2.2	0.0	27.6
		Wind +Y ecc.+	-0.0	0.0	13.8	-0.0	6.0	284.5
		Wind +Y ecc.-	0.0	-0.0	13.8	0.0	6.0	281.5
		Wind -Y ecc.+	0.0	-0.0	-13.8	0.0	-6.0	-284.5
		Wind -Y ecc.-	-0.0	0.0	-13.8	-0.0	-6.0	-281.5
		Earthquake X Mode 1	-0.0	5.9	17.5	2.6	7.6	325.8
		Earthquake X Mode 2	-0.0	-23.5	19.5	-10.2	8.5	538.1
		Earthquake X Mode 3	0.0	0.7	2.4	0.3	1.0	44.1
		Earthquake X Mode 4	0.0	-2.9	-7.9	-1.3	-3.5	-146.9
		Earthquake X Mode 5	0.0	13.1	-9.0	5.7	-3.9	-262.3
		Earthquake X Mode 6	0.0	-0.2	-1.5	-0.1	-0.6	-29.1
		Earthquake X Mode 7	-0.0	1.5	4.4	0.7	1.9	82.2
		Earthquake X Mode 8	-0.0	1.5	4.4	0.7	1.9	81.9
		Earthquake X Mode 9	0.0	9.0	-8.7	3.9	-3.8	-232.3
		Earthquake Y Mode 1	-0.0	2.7	7.9	1.2	3.5	147.9
		Earthquake Y Mode 2	-0.0	-7.3	6.0	-3.2	2.6	166.2
		Earthquake Y Mode 3	0.0	4.6	14.5	2.0	6.3	271.3
		Earthquake Y Mode 4	0.0	-0.6	-1.5	-0.2	-0.7	-28.3
		Earthquake Y Mode 5	0.0	2.4	-1.6	1.0	-0.7	-47.7
		Earthquake Y Mode 6	0.0	-1.9	-12.2	-0.8	-5.3	-239.8
		Earthquake Y Mode 7	-0.0	0.5	1.3	0.2	0.6	24.7
		Earthquake Y Mode 8	-0.0	3.8	11.0	1.7	4.8	204.4
		Earthquake Y Mode 9	0.0	3.3	-3.2	1.4	-1.4	-84.9
Floor 4	12.00	Self weight	7258.5	184871	92475	2.8	-0.0	-46.9
		Dead load	3200.9	77702	54128	0.7	-0.6	-38.0
		Live load	1267.1	31605	15725	1.0	0.1	-12.2
		Wind +X ecc.+	-0.1	167.2	-1.7	55.5	-0.0	-833.4
		Wind +X ecc.-	-0.2	164.8	-2.6	55.5	-0.1	-561.3
		Wind -X ecc.+	0.1	-167.2	1.7	-55.5	0.0	833.4
		Wind -X ecc.-	0.2	-164.8	2.6	-55.5	0.1	561.3
		Wind +Y ecc.+	-0.4	-21.5	396.0	-0.2	129.3	3981.2
		Wind +Y ecc.-	-0.2	-10.6	399.8	-0.1	129.7	2745.0
		Wind -Y ecc.+	0.4	21.5	-396.0	0.2	-129.3	-3981
		Wind -Y ecc.-	0.2	10.6	-399.8	0.1	-129.7	-2745
		Earthquake X Mode 1	-2.2	533.0	289.9	209.2	100.4	6736.6
		Earthquake X Mode 2	1.9	-2633	849.8	-895.5	265.5	25366
		Earthquake X Mode 3	-0.3	75.8	488.7	29.6	163.5	2852.6
		Earthquake X Mode 4	1.1	-167.0	-11.2	-72.0	-6.6	-1785
		Earthquake X Mode 5	-2.8	894.3	-223.5	337.3	-56.7	-8502
		Earthquake X Mode 6	0.1	-11.9	-142.6	-6.0	-47.7	-1035
		Earthquake X Mode 7	-0.4	56.1	-42.7	24.5	-13.6	363.6
		Earthquake X Mode 8	-0.4	52.9	186.9	23.9	63.0	1306.1
		Earthquake X Mode 9	-1.7	339.7	-188.7	137.8	-50.9	-4151
		Earthquake Y Mode 1	-1.0	241.9	131.6	94.9	45.6	3057.1
		Earthquake Y Mode 2	0.6	-813.3	262.5	-276.6	82.0	7835.8
		Earthquake Y Mode 3	-1.9	466.7	3008.0	182.4	1006.5	17557
		Earthquake Y Mode 4	0.2	-32.2	-2.2	-13.9	-1.3	-344.0
		Earthquake Y Mode 5	-0.5	162.6	-40.6	61.3	-10.3	-1546
		Earthquake Y Mode 6	1.1	-98.1	-1174	-49.6	-392.7	-8512
		Earthquake Y Mode 7	-0.1	16.8	-12.8	7.4	-4.1	109.2
		Earthquake Y Mode 8	-1.1	132.0	466.6	59.6	157.4	3260.5
		Earthquake Y Mode 9	-0.6	124.2	-69.0	50.3	-18.6	-1517



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Values referred to the origin (X=0.00, Y=0.00)								
Floor	Elevation (m)	Loadcase	N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
Floor 3	9.00	Self weight	14251	359989	182289	1.8	-0.1	-30.5
		Dead load	5004.6	126477	78430	0.9	-0.1	-18.1
		Live load	4324.8	106665	53580	1.1	0.0	-16.0
		Wind +X ecc.+	-0.5	489.3	-8.5	113.8	-0.0	-1711
		Wind +X ecc.-	-0.6	485.1	-10.0	113.8	-0.2	-1143
		Wind -X ecc.+	0.5	-489.3	8.5	-113.8	0.0	1711.5
		Wind -X ecc.-	0.6	-485.1	10.0	-113.8	0.2	1143.0
		Wind +Y ecc.+	-0.8	-38.9	1187.8	-0.3	265.0	8056.2
		Wind +Y ecc.-	-0.4	-17.0	1195.4	-0.1	265.6	5454.4
		Wind -Y ecc.+	0.8	38.9	-1188	0.3	-265.0	-8056
		Wind -Y ecc.-	0.4	17.0	-1195	0.1	-265.6	-5454
		Earthquake X Mode 1	-5.1	1599.3	817.5	399.8	188.0	12358
		Earthquake X Mode 2	7.0	-7171	2392.2	-1590	484.7	44957
		Earthquake X Mode 3	-0.7	210.3	1367.8	50.5	294.7	5219.8
		Earthquake X Mode 4	1.7	-366.1	-12.6	-75.3	-3.1	-1708
		Earthquake X Mode 5	-5.0	1755.2	-424.0	322.9	-54.6	-8066
		Earthquake X Mode 6	0.2	-26.1	-288.8	-5.6	-49.0	-1052
		Earthquake X Mode 7	-0.3	51.5	-44.9	-3.8	-1.5	-153.6
		Earthquake X Mode 8	-0.3	45.1	164.2	-5.2	-8.4	-192.9
		Earthquake X Mode 9	-1.2	274.2	-151.8	-30.3	9.5	931.0
		Earthquake Y Mode 1	-2.3	725.7	371.0	181.4	85.3	5608.3
		Earthquake Y Mode 2	2.2	-2215	739.0	-491.3	149.7	13887
		Earthquake Y Mode 3	-4.2	1294.5	8418.6	311.0	1813.9	32127
		Earthquake Y Mode 4	0.3	-70.6	-2.4	-14.5	-0.6	-329.3
		Earthquake Y Mode 5	-0.9	319.2	-77.1	58.7	-9.9	-1467
		Earthquake Y Mode 6	1.6	-215.1	-2376	-46.2	-402.9	-8660
		Earthquake Y Mode 7	-0.1	15.5	-13.5	-1.1	-0.4	-46.1
		Earthquake Y Mode 8	-0.7	112.6	410.0	-12.9	-21.0	-481.4
		Earthquake Y Mode 9	-0.4	100.2	-55.5	-11.1	3.5	340.3
Floor 2	6.00	Self weight	21243	535120	272107	1.2	-0.1	-25.0
		Dead load	6807.8	175222	102722	0.6	-0.1	-15.6
		Live load	7382.3	181712	91430	0.9	-0.0	-14.6
		Wind +X ecc.+	-1.5	953.0	-23.6	169.3	-0.0	-2546
		Wind +X ecc.-	-1.6	945.7	-26.1	169.2	-0.2	-1695
		Wind -X ecc.+	1.5	-953.0	23.6	-169.3	0.0	2546.0
		Wind -X ecc.-	1.6	-945.7	26.1	-169.2	0.2	1695.3
		Wind +Y ecc.+	-1.3	-63.1	2368.6	-0.4	395.2	11966
		Wind +Y ecc.-	-0.6	-27.9	2380.6	-0.2	395.9	8053.7
		Wind -Y ecc.+	1.3	63.1	-2369	0.4	-395.2	-11966
		Wind -Y ecc.-	0.6	27.9	-2381	0.2	-395.9	-8054
		Earthquake X Mode 1	-9.6	3022.8	1512.0	543.8	251.5	16560
		Earthquake X Mode 2	18.1	-12983	4521.4	-2109	648.5	59572
		Earthquake X Mode 3	-1.3	380.6	2544.2	65.8	394.9	7014.2
		Earthquake X Mode 4	1.5	-418.4	7.3	-15.3	7.4	-170.5
		Earthquake X Mode 5	-5.0	1902.0	-441.2	48.4	-5.9	-1128
		Earthquake X Mode 6	0.2	-29.2	-323.1	-0.7	-11.3	-218.8
		Earthquake X Mode 7	0.1	-14.1	-0.3	-27.8	13.0	-460.0
		Earthquake X Mode 8	0.1	-15.5	-37.6	-26.8	-69.4	-1435
		Earthquake X Mode 9	0.9	-90.7	52.9	-155.2	57.0	4657.9
		Earthquake Y Mode 1	-4.4	1371.7	686.2	246.8	114.1	7514.9
		Earthquake Y Mode 2	5.6	-4010	1396.7	-651.6	200.3	18402
		Earthquake Y Mode 3	-7.8	2342.4	15659	405.0	2430.6	43171
		Earthquake Y Mode 4	0.3	-80.7	1.4	-3.0	1.4	-32.9
		Earthquake Y Mode 5	-0.9	345.8	-80.2	8.8	-1.1	-205.1
		Earthquake Y Mode 6	1.4	-240.2	-2659	-5.5	-93.3	-1800
		Earthquake Y Mode 7	0.0	-4.2	-0.1	-8.3	3.9	-138.2
		Earthquake Y Mode 8	0.4	-38.7	-94.0	-66.8	-173.3	-3581
		Earthquake Y Mode 9	0.3	-33.1	19.3	-56.7	20.9	1702.4



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Values referred to the origin (X=0.00, Y=0.00)								
Floor	Elevation (m)	Loadcase	N (kN)	Mx (kN·m)	My (kN·m)	Qx (kN)	Qy (kN)	T (kN·m)
Floor 1	3.00	Self weight	28235	710240	361921	0.6	-0.2	-18.4
		Dead load	8611.2	223982	127018	0.6	-0.1	-12.8
		Live load	10440	256758	129281	0.7	-0.1	-14.6
		Wind +X ecc.+	-2.9	1550.9	-45.9	221.4	-0.0	-3330
		Wind +X ecc.-	-3.1	1540.6	-49.4	221.3	-0.2	-2214
		Wind -X ecc.+	2.9	-1551	45.9	-221.4	0.0	3330.0
		Wind -X ecc.-	3.1	-1541	49.4	-221.3	0.2	2213.8
		Wind +Y ecc.+	-1.8	-89.1	3919.1	-0.5	518.6	15676
		Wind +Y ecc.-	-0.8	-39.8	3935.8	-0.2	519.4	10517
		Wind -Y ecc.+	1.8	89.1	-3919	0.5	-518.6	-15676
		Wind -Y ecc.-	0.8	39.8	-3936	0.2	-519.4	-10517
		Earthquake X Mode 1	-14.9	4679.5	2305.8	633.0	288.4	19117
		Earthquake X Mode 2	32.0	-19610	6995.4	-2428	748.5	68521
		Earthquake X Mode 3	-1.9	574.4	3909.0	74.9	458.1	8132.5
		Earthquake X Mode 4	0.6	-279.3	43.8	60.8	16.8	1676.0
		Earthquake X Mode 5	-1.9	1201.6	-233.2	-282.6	52.9	7213.5
		Earthquake X Mode 6	0.1	-19.1	-213.2	5.0	37.2	838.5
		Earthquake X Mode 7	0.1	-22.0	16.3	-2.3	5.6	45.4
		Earthquake X Mode 8	0.1	-20.4	-64.3	-1.4	-8.8	-152.1
		Earthquake X Mode 9	1.0	-112.7	67.3	-8.9	4.3	259.3
		Earthquake Y Mode 1	-6.7	2123.6	1046.4	287.3	130.9	8675.6
		Earthquake Y Mode 2	9.9	-6058	2160.9	-750.0	231.2	21166
		Earthquake Y Mode 3	-11.9	3535.2	24060	461.1	2819.8	50054
		Earthquake Y Mode 4	0.1	-53.8	8.4	11.7	3.2	323.1
		Earthquake Y Mode 5	-0.3	218.5	-42.4	-51.4	9.6	1311.6
		Earthquake Y Mode 6	0.6	-156.9	-1754	41.0	305.8	6898.9
		Earthquake Y Mode 7	0.0	-6.6	4.9	-0.7	1.7	13.6
		Earthquake Y Mode 8	0.3	-51.0	-160.5	-3.6	-22.0	-379.6
		Earthquake Y Mode 9	0.4	-41.2	24.6	-3.3	1.6	94.8
Foundations	0.00	Self weight	35261	886984	452268	0.0	-0.0	0.0
		Dead load	10426	273297	151497	0.0	-0.0	-0.0
		Live load	13504	332124	167236	0.0	-0.0	0.0
		Wind +X ecc.+	0.0	2501.5	-0.0	270.2	0.0	-4064
		Wind +X ecc.-	0.0	2501.5	-0.0	270.2	0.0	-2694
		Wind -X ecc.+	-0.0	-2502	0.0	-270.2	-0.0	4063.5
		Wind -X ecc.-	-0.0	-2502	0.0	-270.2	-0.0	2694.3
		Wind +Y ecc.+	0.0	-0.0	5855.9	-0.0	635.6	19204
		Wind +Y ecc.-	0.0	0.0	5855.9	0.0	635.6	12842
		Wind -Y ecc.+	-0.0	0.0	-5856	0.0	-635.6	-19204
		Wind -Y ecc.-	-0.0	-0.0	-5856	-0.0	-635.6	-12842
		Earthquake X Mode 1	0.0	7403.9	3454.4	669.4	303.7	20156
		Earthquake X Mode 2	-0.0	-28803	8854.4	-2550	787.7	71997
		Earthquake X Mode 3	0.0	902.9	5389.2	78.5	483.1	8566.4
		Earthquake X Mode 4	0.0	-6.3	92.5	101.2	19.5	2616.0
		Earthquake X Mode 5	0.0	-68.2	44.7	-453.8	82.5	11520
		Earthquake X Mode 6	-0.0	0.8	-23.0	7.7	63.7	1405.0
		Earthquake X Mode 7	-0.0	65.5	-12.8	30.7	-9.2	580.5
		Earthquake X Mode 8	0.0	60.6	151.9	29.2	72.8	1517.5
		Earthquake X Mode 9	0.0	351.1	-136.2	171.0	-62.5	-5107
		Earthquake Y Mode 1	0.0	3359.9	1567.6	303.8	137.8	9146.7
		Earthquake Y Mode 2	-0.0	-8897	2735.2	-787.6	243.3	22240
		Earthquake Y Mode 3	0.0	5557.5	33170	482.9	2973.6	52725
		Earthquake Y Mode 4	0.0	-1.2	17.8	19.5	3.8	504.3
		Earthquake Y Mode 5	0.0	-12.4	8.1	-82.5	15.0	2094.7
		Earthquake Y Mode 6	-0.0	6.4	-189.5	63.7	524.4	11560
		Earthquake Y Mode 7	-0.0	19.7	-3.8	9.2	-2.8	174.4
		Earthquake Y Mode 8	0.0	151.2	379.2	72.8	181.7	3788.2
		Earthquake Y Mode 9	0.0	128.3	-49.8	62.5	-22.8	-1867

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1.- SEISMIC

Design code used: CIRSOC 103-1991

Reglamento INPRES - CIRSOC 103 - Tomo I - 1991

Normas Argentinas para Construcción Sismorresistente

Calculation method: Análisis modal espectral (CIRSOC 103-1991, 14.2)

1.1.- Earthquake general data

Location characterisation

Capital (PROVINCIA DE CORDOBA)

Seismic zone (CIRSOC 103-1991, Capítulo 3): Peligrosidad sísmica reducida.

Tipo de terreno (CIRSOC 103-1991, 6.2): Tipo III (suelos blandos).

Structural system

μ_x : Global ductility (X) (CIRSOC 103-1991, 8.3)

μ_x : 3.50

μ_y : Global ductility (Y) (CIRSOC 103-1991, 8.3)

μ_y : 3.50

ξ : Damping (CIRSOC 103-1991, 12.3)

ξ : 5

Agrupamiento de la construcción según su destino (CIRSOC 103-1991, 5.1): Grupo B
(factor de riesgo = 1.0)

Analysis parameters

Number of vibration modes considered in the analysis: Based on the Code

Fraction of live load

: 0.25

Fraction of snow load

: 0.00

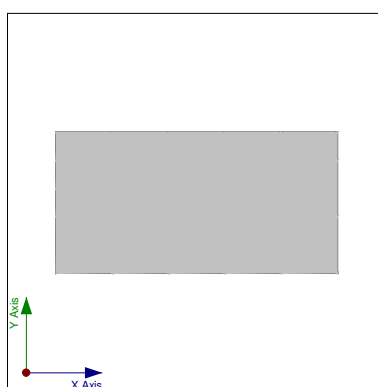
The analysis of 2nd order effects is not carried out

Reinforcement criteria to apply by ductility: None

Analysis directions

Seismic action in direction X

Seismic action in direction Y

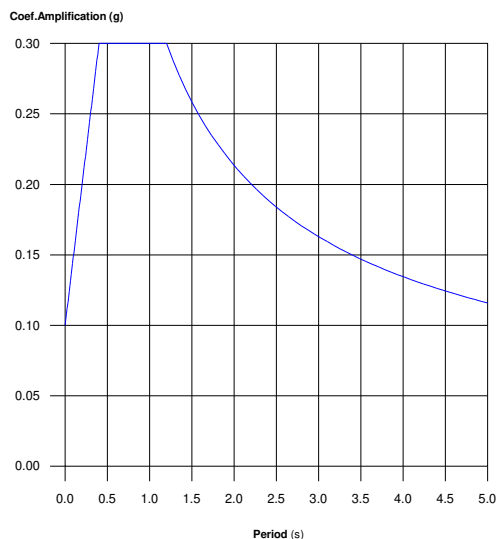


On-plan projection of the job



1.2.- Design spectrum

1.2.1.- Elastic acceleration spectrum



Coef. Amplification:

$$S_{ae} = \left[a_s + (f_A \cdot b - a_s) \cdot \frac{T}{T_1} \right] \cdot \gamma_d \quad T \leq T_1$$

$$S_{ae} = f_A \cdot b \cdot \gamma_d \quad T_1 \leq T \leq T_2$$

$$S_{ae} = \left[1 + (f_A - 1) \frac{T_2}{T} \right] \cdot \left[b \cdot \left(\frac{T_2}{T} \right)^{2/3} \right] \cdot \gamma_d \quad T \geq T_2$$

The maximum value of the spectral ordinates is 0.300 g.

CIRSOC 103-1991 (7.2 y 14.2.2)

Parameters required to define the spectrum

a_s: Ordenada al origen del espectro o aceleración máxima del suelo (CIRSOC 103-1991, Tabla 4)

Seismic zone (CIRSOC 103-1991, Capítulo 3): Peligrosidad sísmica reducida.

Tipo de terreno (CIRSOC 103-1991, 6.2): Tipo III (suelos blandos).

$$a_s : \underline{0.10}$$

b: Ordenada del plafón del espectro o máxima pseudoaceleración (CIRSOC 103-1991, Tabla 4)

Seismic zone (CIRSOC 103-1991, Capítulo 3): Peligrosidad sísmica reducida.

Tipo de terreno (CIRSOC 103-1991, 6.2): Tipo III (suelos blandos).

$$b : \underline{0.30}$$

T₁: Periodo correspondiente al comienzo del plafón (CIRSOC 103-1991, Tabla 4)

$$T_1 : \underline{0.40} \text{ s}$$

T₂: Periodo correspondiente al fin del plafón (CIRSOC 103-1991, Tabla 4)

$$T_2 : \underline{1.20} \text{ s}$$

Seismic zone (CIRSOC 103-1991, Capítulo 3): Peligrosidad sísmica reducida.

Tipo de terreno (CIRSOC 103-1991, 6.2): Tipo III (suelos blandos).

f_A: Factor de amplificación por amortiguamiento (CIRSOC 103-1991, 7.2.3)

$$f_A : \underline{1.00}$$

$$f_A = \left[\frac{5}{\xi} \right]^{1/2}$$

Where:

$$f_A \geq 1$$

ξ: Damping (CIRSOC 103-1991, 12.3)

$$\xi : \underline{5}$$

γ_d: Factor de riesgo (CIRSOC 103-1991, 5.2)

$$\gamma_d : \underline{1.00}$$

Agrupamiento de la construcción según su destino (CIRSOC 103-1991, 5.1): Grupo B (factor de riesgo = 1.0)



Justification of seismic action

edificio 2.0

Date: 11/20/20

1.2.2.- Design acceleration spectrum

El espectro de diseño sísmico se obtiene reduciendo el espectro elástico por el coeficiente (R) correspondiente a cada dirección de análisis.

$$S_a = \frac{S_{ae}}{R}$$

Ductility reduction factor

$$R = 1 + (\mu - 1) \frac{T}{T_1} \quad T \leq T_1$$

$$R = \mu \quad T \geq T_1$$

R_x: Ductility reduction factor (X) (CIRSOC 103-1991, 8.1)

R_y: Ductility reduction factor (Y) (CIRSOC 103-1991, 8.1)

μ_x: Global ductility (X) (CIRSOC 103-1991, 8.3)

μ_x : 3.50

μ_y: Global ductility (Y) (CIRSOC 103-1991, 8.3)

μ_y : 3.50

T₁: Periodo correspondiente al comienzo del plafón (CIRSOC 103-1991, Tabla 4)

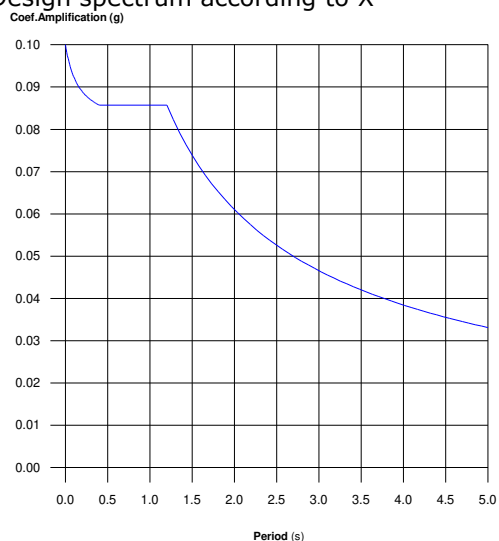
T₁ : 0.40 s

Seismic zone (CIRSOC 103-1991, Capítulo 3): Peligrosidad sísmica reducida.

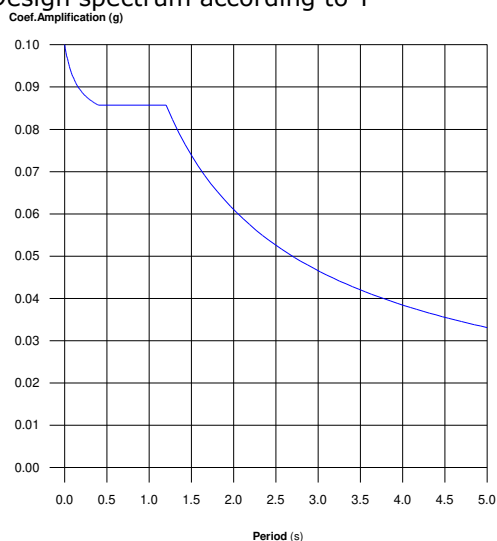
Tipo de terreno (CIRSOC 103-1991, 6.2): Tipo III (suelos blandos).

CIRSOC 103-1991 (14.2)

Design spectrum according to X



Design spectrum according to Y





Justification of seismic action

edificio 2.0

Date: 11/20/20

1.3.- Participation coefficients

Mode	T	L_x	L_y	L_{gz}	M_x	M_y	Loadcase X(1)	Loadcase Y(1)
Mode 1	0.447	0.0315	0.0143	0.9994	16.1 %	3.32 %	R = 3.5 A = 0.841 m/s ² D = 4.25882 mm	R = 3.5 A = 0.841 m/s ² D = 4.25882 mm
Mode 2	0.400	0.1363	0.0421	0.9898	61.34 %	5.86 %	R = 3.5 A = 0.841 m/s ² D = 3.41325 mm	R = 3.5 A = 0.841 m/s ² D = 3.41325 mm
Mode 3	0.378	0.0292	0.1798	0.9833	1.88 %	71.4 %	R = 3.36 A = 0.843 m/s ² D = 3.05231 mm	R = 3.36 A = 0.843 m/s ² D = 3.05231 mm
Mode 4	0.136	0.0293	0.0056	0.9996	2.3 %	0.09 %	R = 1.85 A = 0.891 m/s ² D = 0.41708 mm	R = 1.85 A = 0.891 m/s ² D = 0.41708 mm
Mode 5	0.119	0.13	0.0236	0.9912	10.23 %	0.34 %	R = 1.74 A = 0.897 m/s ² D = 0.32176 mm	R = 1.74 A = 0.897 m/s ² D = 0.32176 mm
Mode 6	0.117	0.0616	0.5068	0.8598	0.17 %	11.82 %	R = 1.73 A = 0.898 m/s ² D = 0.31053 mm	R = 1.73 A = 0.898 m/s ² D = 0.31053 mm
Mode 7	0.070	0.0252	0.0076	0.9997	0.67 %	0.06 %	R = 1.44 A = 0.921 m/s ² D = 0.11565 mm	R = 1.44 A = 0.921 m/s ² D = 0.11565 mm
Mode 8	0.061	0.3008	0.7509	0.588	0.64 %	3.97 %	R = 1.38 A = 0.927 m/s ² D = 0.08714 mm	R = 1.38 A = 0.927 m/s ² D = 0.08714 mm
Mode 9	0.059	0.1326	0.0485	0.99	3.73 %	0.5 %	R = 1.37 A = 0.928 m/s ² D = 0.0824 mm	R = 1.37 A = 0.928 m/s ² D = 0.0824 mm
Total					97.06 %	97.36 %		

T: Vibration period in seconds.

L_x , L_y : Participation coefficients normalized in each direction of the analysis.

L_{gz} : Standardised participation coefficient corresponding to the rotational degree of freedom.

M_x , M_y : Percentage of mass displaced in each mode in each direction of the analysis.

R: Ratio of the acceleration calculated using the ductility assigned to the structure to the acceleration calculated without ductility.

A: Calculated acceleration, including ductility.

D: Mode coefficient. Equivalent to the maximum displacement of the dynamic degree of freedom.

Representation of the modal periods

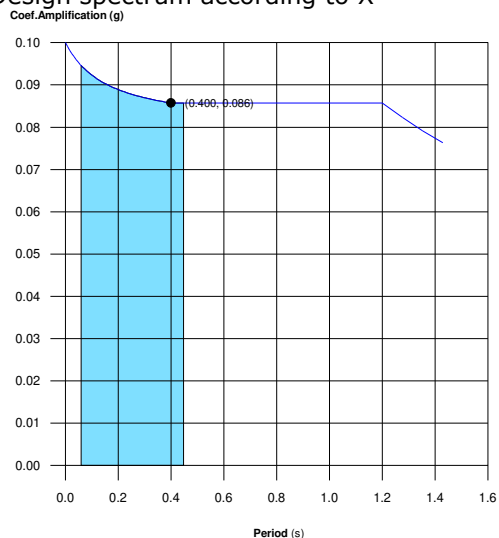


Justification of seismic action

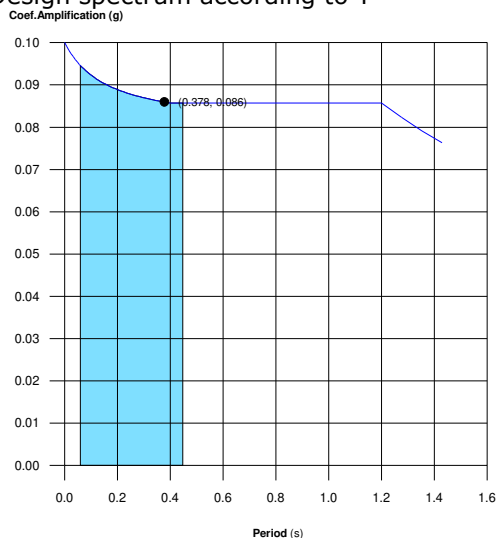
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Design spectrum according to X



Design spectrum according to Y



Represented are the range of periods covered by the modes that have been studied, indicating those where more than 30% of the mass is displaced:

Loadcase Seismic X1		
Modal loadcase	T (s)	A (g)
Mode 2	0.400	0.086

Loadcase Seismic Y1		
Modal loadcase	T (s)	A (g)
Mode 3	0.378	0.086

1.4.- Centre of mass, centre of stiffness and eccentricities of each floor

Floor	c.o.m. (m)	c.o.s. (m)	e_x (m)	e_y (m)
Floor 6	(47.22, 13.32)	(46.41, 13.33)	0.81	-0.01
techo	(24.77, 13.95)	(29.99, 14.42)	-5.22	-0.47
Floor 4	(25.40, 12.93)	(27.49, 14.54)	-2.09	-1.62
Floor 3	(25.41, 12.93)	(27.50, 14.53)	-2.09	-1.61
Floor 2	(25.41, 12.93)	(27.50, 14.53)	-2.09	-1.61
Floor 1	(25.41, 12.93)	(27.50, 14.53)	-2.09	-1.61

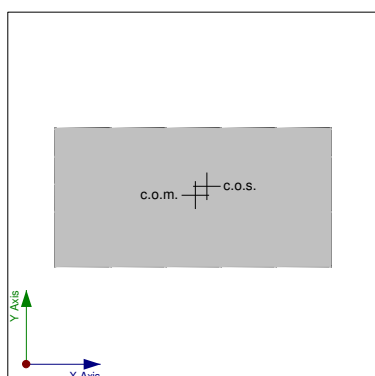
c.o.m.: Coordinates of the centre of mass of the floor (X,Y)

c.o.s.: Coordinates of the centre of stiffness of the floor (X,Y)

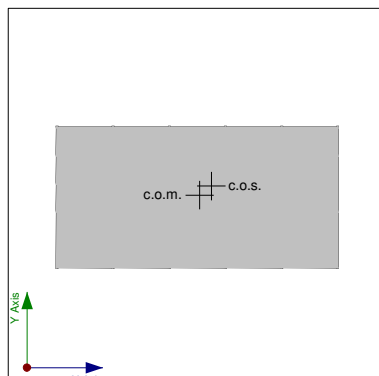
e_x : Eccentricity of the centre of mass with respect to the centre of stiffness (X)

e_y : Eccentricity of the centre of mass with respect to the centre of stiffness (Y)

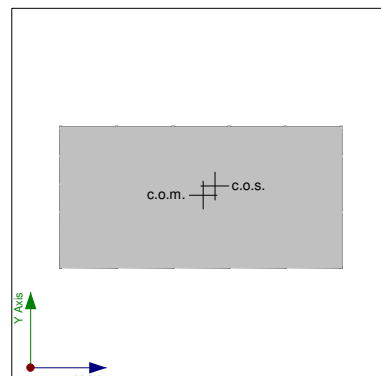
Graphical representation of the centre of mass and centre of stiffness per floor



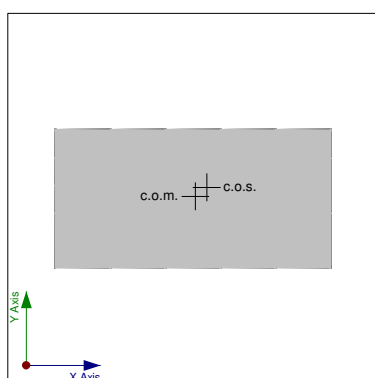
Floor 1



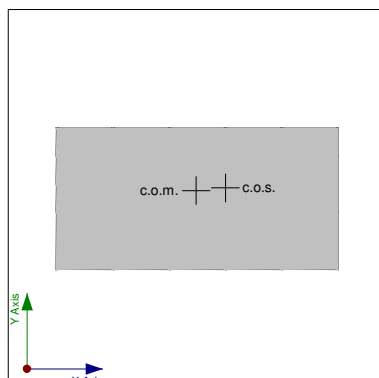
Floor 2



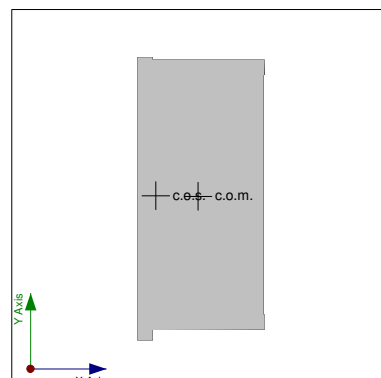
Floor 3



Floor 4



techo



Floor 6

1.5.- Combined seismic shear per floor

The maximum value of the shear force per floor in a given seismic loadcase is obtained using the Complete Quadratic Combination (CQC) of the corresponding modal shear forces.

If the job has beams with external fixity or integrated 3D structures, the forces of the elements are not displayed in the following report.

1.5.1.- Combined seismic shear and equivalent seismic force per floor

The values displayed in the following tables have not been adjusted by the modification factor calculated in section 'Correction due to base shear'.

Earthquake loadcase: Seismic X1

Floor	Q_x (kN)	$F_{eq,x}$ (kN)	Q_y (kN)	$F_{eq,y}$ (kN)
Floor 6	14.353	14.353	17.167	17.167
techo	1111.340	1097.385	480.979	465.833
Floor 4	1880.402	839.970	833.723	396.848
Floor 3	2459.429	701.545	1114.107	315.763
Floor 2	2844.135	560.536	1281.971	235.089
Floor 1	3023.237	329.123	1362.432	176.039

Earthquake loadcase: Seismic Y1

Floor	Q_x (kN)	$F_{eq,x}$ (kN)	Q_y (kN)	$F_{eq,y}$ (kN)
Floor 6	6.568	6.568	13.591	13.591
techo	504.258	497.972	1172.839	1160.955
Floor 4	851.182	390.427	2000.355	894.622

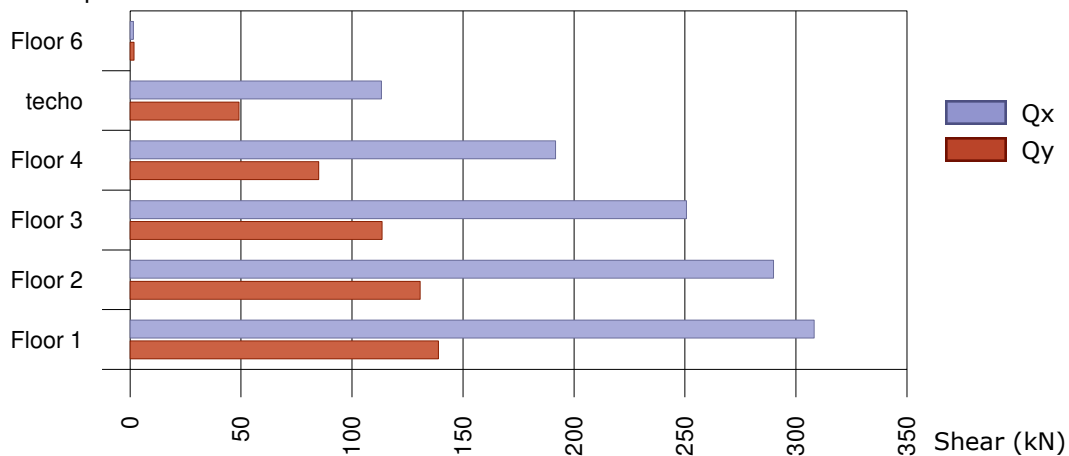


Justification of seismic action

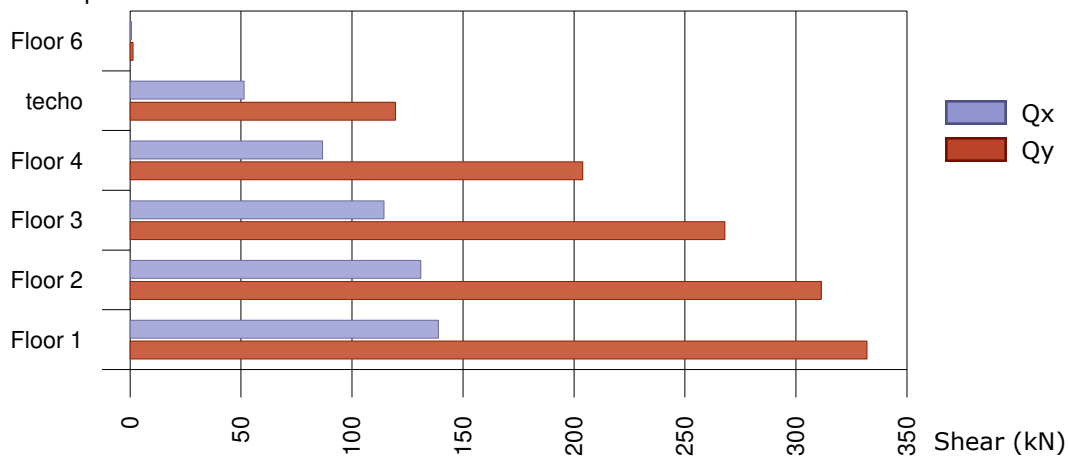
Floor	Q_x (kN)	$F_{eq,X}$ (kN)	Q_y (kN)	$F_{eq,Y}$ (kN)
Floor 3	1122.261	306.296	2628.851	759.539
Floor 2	1285.126	233.678	3055.328	613.924
Floor 1	1362.155	167.718	3257.777	363.473

Maximum seismic shear forces per floor

Earthquake loadcase: Seismic X1



Earthquake loadcase: Seismic Y1



Equivalent seismic forces per floor

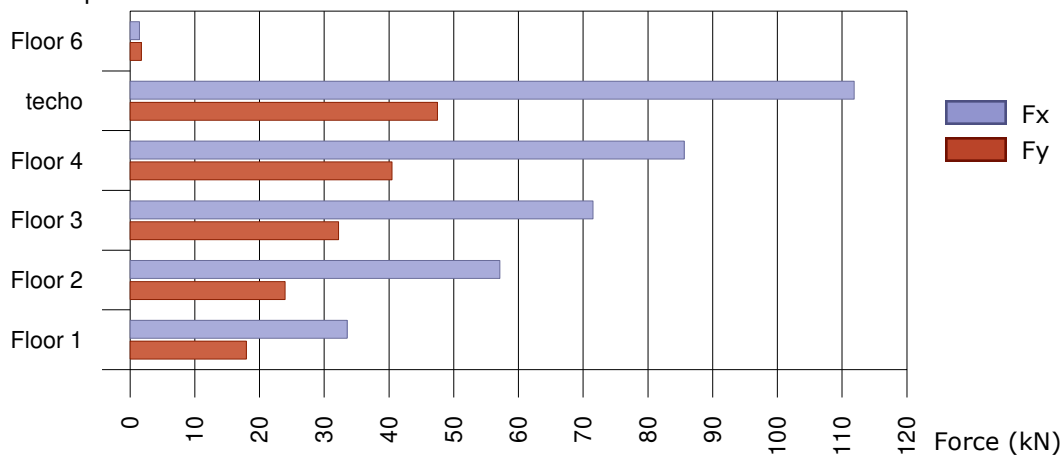


Justification of seismic action

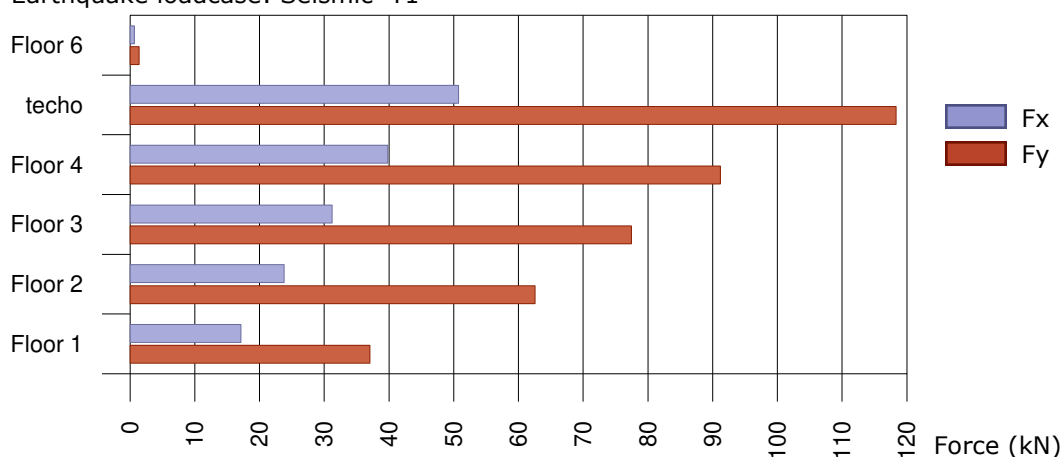
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Date: 11/20/20

Earthquake loadcase: Seismic X1



Earthquake loadcase: Seismic Y1



1.5.2.- Seismic shear percentage resisted per type of support and per floor

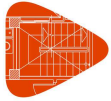
The seismic shear percentage of column 'Walls' includes the shear resisted by walls, shear walls and bracing elements.

Earthquake loadcase: Seismic X1

Floor	%Q _x		%Q _y	
	Columns	Walls	Columns	Walls
Floor 6	0.00	100.00	0.00	100.00
techo	26.62	73.38	16.66	83.34
Floor 4	29.79	70.21	20.24	79.76
Floor 3	27.49	72.51	18.81	81.19
Floor 2	25.01	74.99	17.80	82.20
Floor 1	17.76	82.24	14.03	85.97

Earthquake loadcase: Seismic Y1

Floor	%Q _x		%Q _y	
	Columns	Walls	Columns	Walls
Floor 6	0.00	100.00	0.00	100.00
techo	25.68	74.32	22.21	77.79
Floor 4	28.93	71.07	27.83	72.17
Floor 3	26.51	73.49	25.91	74.09
Floor 2	24.15	75.85	24.59	75.41



Justification of seismic action

Floor	%Q _x		%Q _y	
	Columns	Walls	Columns	Walls
Floor 1	16.91	83.09	19.61	80.39

1.5.3.- Seismic shear percentage resisted per type of support at starts

The seismic shear percentage of column 'Walls' includes the shear resisted by walls, shear walls and bracing elements.

Earthquake loadcase	%Q _x		%Q _y	
	Columns	Walls	Columns	Walls
Seismic X1	17.76	82.24	14.03	85.97
Seismic Y1	16.91	83.09	19.61	80.39

Surface and volume takeoff

Job: edificio 2.0

Group of Floors Number 1: Floors 1 to 4

Number of Equal Floors: 4

Total surface: $1242.35 \times 4 = 4969.40 \text{ m}^2$

Total floor surface: $1088.52 \times 4 = 4354.08 \text{ m}^2$

Waffle slabs: $1088.52 \times 4 = 4354.08 \text{ m}^2$

Drop panels: $0.00 \times 4 = 0.00 \text{ m}^2$

Lightweight: $1088.52 \times 4 = 4354.08 \text{ m}^2$

Surface area of beams, edge beams and walls on plan: $146.88 \times 4 = 587.52 \text{ m}^2$

Lateral surface of beams, edge beams and walls: $251.35 \times 4 = 1005.40 \text{ m}^2$

Total concrete in beams: $76.52 \times 4 = 306.08 \text{ m}^3$

Beams: $76.52 \times 4 = 306.08 \text{ m}^3$

Total floor volume: $157.84 \times 4 = 631.36 \text{ m}^3$

Waffle slabs: $157.84 \times 4 = 631.36 \text{ m}^3$

Lightweight: $157.84 \times 4 = 631.36 \text{ m}^3$

Group of Floors Number 2: techo

Number of Equal Floors: 1

Total surface: 1262.38 m^2

Total floor surface: 1105.43 m^2

Waffle slabs: 1105.43 m^2

Drop panels: 0.00 m^2

Lightweight: 1105.43 m^2

Surface area of beams, edge beams and walls on plan: 150.00 m^2

Lateral surface of beams, edge beams and walls: 243.86 m^2

Total concrete in beams: 79.33 m^3

Beams: 79.33 m^3

Total floor volume: 160.29 m^3

Waffle slabs: 160.29 m^3

Lightweight: 160.29 m^3

Group of Floors Number 3: Floor 6

Number of Equal Floors: 1

Total surface: 12.73 m^2

Total floor surface: 8.43 m^2

Waffle slabs: 8.43 m^2

Drop panels: 0.00 m^2

Lightweight: 8.43 m^2

Surface area of beams, edge beams and walls on plan: 4.30 m^2

Lateral surface of beams, edge beams and walls: 8.84 m^2

Total concrete in beams: 1.54 m^3

Beams: 1.54 m^3

Total floor volume: 1.22 m^3

Waffle slabs: 1.22 m^3

Lightweight: 1.22 m^3

Surface and volume takeoff

Job: edificio 2.0

Job total summary

Total surface: 6244.51 m²

Total floor surface: 5467.94 m²

Waffle slabs: 5467.94 m²

Drop panels: 0.00 m²

Lightweight: 5467.94 m²

Surface area of beams, edge beams and walls on plan: 741.82 m²

Lateral surface of beams, edge beams and walls: 1258.10 m²

Total concrete in beams: 386.95 m³

Beams: 386.95 m³

Total floor volume: 792.87 m³

Waffle slabs: 792.87 m³

Lightweight: 792.87 m³



Job takeoffs

Foundations - Total surface: 11.72 m2

Element	Surface (m2)
Beams	11.72
Total	11.72
Index (per m2)	1.000

Floors 1 to 4 - Total surface: 1242.35 m2 x 4

Element	Surface (m2)	Volume (m3)	Bars (Kg)
Floor slabs	4 x 1088.52	4 x 157.84	4 x 10420
Beams	4 x 146.88	4 x 76.52	4 x 10343
Side formwork	4 x 251.35		
Walls	938.16	140.72	7140
Columns (Top Formwork)			
Floor 4	140.70	17.09	2849
Floor 3	140.70	17.09	2837
Floor 2	140.70	17.09	3056
Floor 1	140.70	17.09	3426
Total	7447.96	1146.52	102360
Index (per m2)	1.499	0.231	20.60

Nº of waffle slab forms = 6367 Units x 4

techo - Total surface: 1262.38 m2

Element	Surface (m2)	Volume (m3)	Bars (Kg)
Floor slabs	1105.43	160.29	8531
Beams	150.00	79.33	8434
Side formwork	243.86		
Walls	234.54	35.18	1414
Columns (Top Formwork)	139.96	16.99	2136
Total	1873.79	291.79	20515
Index (per m2)	1.484	0.231	16.25

Nº of waffle slab forms = 6338 Units

Floor 6 - Total surface: 12.73 m2

Element	Surface (m2)	Volume (m3)	Bars (Kg)
Floor slabs	8.43	1.22	39
Beams	4.30	1.54	224
Side formwork	8.84		
Walls	18.84	2.83	97
Columns (Top Formwork)	0.00		
Total	40.41	5.59	360
Index (per m2)	3.174	0.439	28.28

Nº of waffle slab forms = 52 Units



Job takeoffs

Job total - Total surface: 6256.23 m2

Element	Surface (m2)	Volume (m3)	Bars (Kg)
Floor slabs	5467.94	792.87	50250
Beams	753.54	386.95	50030
Side formwork	1258.10		
Walls	1191.54	178.73	8651
Columns (Top Formwork)	702.76	85.35	14304
Total	9373.88	1443.90	123235
Index (per m2)	1.498	0.231	19.70

Nº of waffle slab forms = 31858 Units

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1.- NOTATION (COLUMNS)

In the steel column check tables, checks with a usage factor less than 10% are not displayed.

Arrgmt.: Reinforcement arrangement

Reinf.: Minimum and maximum reinforcement

Q: Ultimate shear resistance

N,M: Limit state at failure under normal stresses

Arrgmt. S.: Seismic design criteria

Cap.: Capacity design

2.- COLUMNS

2.1.- C1

Floor	Span (m)	Dimension	Position	Concrete sections										Checks						Status
				Nature	Worst case forces				Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)					
					N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)								Qy (kN)				
techo	12.00/15.00	50x50	Base	DL, LL, E	175.5	-107.9	-96.7	-69.0	77.7	Verified	Verified	92.9	62.3	D.N.P.	Verified	92.9	Verified			
Floor 4	9.00/12.00	50x50	Base	DL, LL	196.4	-122.1	-121.3	-84.5	83.8	Verified	Verified	72.3	74.4	D.N.P.	Verified	74.4	Verified			
			12.00 m	DL, LL, E	175.5	-107.9	-96.7	-69.0	77.7	D.N.P.	D.N.P.	D.N.P.	62.3	D.N.P.	Verified	62.3	Verified			
			Head	DL, LL, E	410.0	113.6	81.5	-69.6	92.2	Verified	Verified	76.4	57.4	D.N.P.	Verified	76.4	Verified			
			12.00 m	DL, LL	196.4	-122.1	-121.3	-84.5	83.8	D.N.P.	D.N.P.	D.N.P.	74.4	D.N.P.	Verified	74.4	Verified			
			Head	DL, LL	486.0	121.5	113.4	-95.5	101.4	Verified	Verified	70.6	69.0	D.N.P.	Verified	70.6	Verified			
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	663.0	121.0	85.2	-70.2	97.8	Verified	Verified	41.8	63.8	D.N.P.	Verified	63.8	Verified			
Floor 2	3.00/6.00	50x50	Head	DL, LL	791.9	120.0	115.5	-94.8	98.9	Verified	Verified	51.7	73.3	D.N.P.	Verified	73.3	Verified			
			Base	DL, LL, E	934.9	-131.8	-93.2	-73.7	105.1	Verified	Verified	41.0	72.6	D.N.P.	Verified	72.6	Verified			
			Head	DL, LL, E	917.3	120.5	83.8	-73.7	105.1	Verified	Verified	41.2	66.7	D.N.P.	Verified	66.7	Verified			
			Base	DL, LL	1115.4	-133.1	-126.3	-100.8	106.1	Verified	Verified	50.4	83.8	D.N.P.	Verified	83.8	Verified			
			Head	DL, LL	1097.7	121.7	115.6	-100.8	106.1	Verified	Verified	50.7	77.4	D.N.P.	Verified	77.4	Verified			
Floor 1	0.00/3.00	50x50	3.00 m	DL, LL, E	934.9	-131.8	-93.2	-73.7	105.1	D.N.P.	D.N.P.	D.N.P.	72.6	D.N.P.	Verified	72.6	Verified			
			Head	DL, LL, E	1167.9	100.4	77.6	-49.7	84.3	Verified	Verified	29.4	63.2	D.N.P.	Verified	63.2	Verified			
			3.00 m	DL, LL	1115.4	-133.1	-126.3	-100.8	106.1	D.N.P.	D.N.P.	D.N.P.	83.8	D.N.P.	Verified	83.8	Verified			
			Head	DL, LL	1400.4	113.2	106.6	-71.1	74.6	Verified	Verified	33.2	77.2	D.N.P.	Verified	77.2	Verified			
Foundations	-0.15/0.00	50x50	Base	DL, LL, E	1185.6	-102.0	-41.7	-49.7	84.3	D.N.P.	D.N.P.	D.N.P.	57.1	D.N.P.	Verified	57.1	Verified			
			Base	DL, LL	1418.0	-65.8	-64.1	-71.1	74.6	D.N.P.	D.N.P.	D.N.P.	59.1	D.N.P.	Verified	59.1	Verified			

2.2.- C2

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	346.5	-180.5	10.8	8.5	127.4	Verified	Verified	67.9	59.3	D.N.P.	Verified	67.9	Verified
			Base	DL, LL	397.1	-220.5	14.3	10.9	149.2	Verified	Verified	90.6	74.7	D.N.P.	Verified	90.6	Verified
			Head	DL, LL, E	757.8	165.6	-32.4	25.5	138.1	Verified	Verified	68.7	65.6	D.N.P.	Verified	68.7	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	765.6	181.6	-6.3	5.5	149.9	Verified	Verified	98.9	65.6	D.N.P.	Verified	98.9	Verified
			Base	DL, LL	960.6	-227.9	10.3	8.1	190.3	Verified	Verified	94.9	82.6	D.N.P.	Verified	94.9	Verified
			Head	DL, LL	942.9	228.8	-9.2	8.1	190.3	Verified	Verified	97.4	82.0	D.N.P.	Verified	97.4	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1204.8	189.0	-12.1	9.4	154.5	Verified	Verified	46.0	76.7	D.N.P.	Verified	76.7	Verified
			Head	DL, LL	1505.8	222.8	-11.8	9.5	184.1	Verified	Verified	58.0	91.9	D.N.P.	Verified	91.9	Verified
			Base	DL, LL, E	1662.9	-207.2	13.5	11.0	165.8	Verified	Verified	43.5	82.0	D.N.P.	Verified	82.0	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL, E	1645.2	190.7	-12.9	11.0	165.8	Verified	Verified	43.7	78.1	D.N.P.	Verified	78.1	Verified
			Base	DL, LL	2086.8	-247.7	13.8	10.7	198.3	Verified	Verified	54.5	99.8	D.N.P.	Verified	99.8	Verified
			Head	DL, LL	2069.2	228.1	-11.8	10.7	198.3	Verified	Verified	54.7	95.4	D.N.P.	Verified	95.4	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL, E	2083.4	164.4	-13.6	11.0	123.4	Verified	Verified	28.5	77.8	D.N.P.	Verified	77.8	Verified
			Head	DL, LL	2631.2	208.2	-12.7	8.4	138.1	Verified	Verified	33.1	97.8	D.N.P.	Verified	97.8	Verified
Floor			Base	DL, LL, E	2101.1	-131.8	12.9	11.0	123.4	D.N.P.	D.N.P.	D.N.P.	84.5	D.N.P.	Verified	84.5	Verified
Foundations	-0.22/0.00	50x50	Base	DL, LL	2648.9	-123.2	7.5	8.4	138.1	D.N.P.	D.N.P.	D.N.P.	98.1	D.N.P.	Verified	98.1	Verified



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2.3.- C3

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	331.7	-180.8	0.3	0.2	128.4	Verified	Verified	68.5	59.2	D.N.P.	Verified	68.5	Verified
			Base	DL, LL	379.6	-221.3	-3.7	-2.9	150.9	Verified	Verified	91.6	75.1	D.N.P.	Verified	91.6	Verified
Floor 4	9.00/12.00	50x50	Base	DL, LL, E	758.2	-172.8	3.2	3.4	144.7	Verified	Verified	86.1	63.2	D.N.P.	Verified	86.1	Verified
			Head	DL, LL, E	740.5	174.5	-5.1	3.5	144.6	Verified	Verified	94.0	63.1	D.N.P.	Verified	94.0	Verified
			Base	DL, LL	929.8	-223.9	-2.2	-1.6	186.5	Verified	Verified	94.7	79.8	D.N.P.	Verified	94.7	Verified
			Head	DL, LL	912.1	223.7	1.7	-1.6	186.5	Verified	Verified	96.4	79.0	D.N.P.	Verified	96.4	Verified
			Base	DL, LL, E	1166.4	181.5	-6.3	4.8	148.5	Verified	Verified	44.6	73.3	D.N.P.	Verified	73.3	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1166.5	181.5	-6.3	4.8	148.5	Verified	Verified	44.6	73.3	D.N.P.	Verified	73.3	Verified
			Head	DL, LL	1460.8	220.0	2.2	-1.8	181.7	Verified	Verified	57.7	89.4	D.N.P.	Verified	89.4	Verified
			Base	DL, LL, E	1610.5	-196.7	7.1	6.0	157.5	Verified	Verified	41.2	79.9	D.N.P.	Verified	79.9	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL, E	1592.8	181.4	-7.4	6.0	157.5	Verified	Verified	41.4	76.3	D.N.P.	Verified	76.3	Verified
			Base	DL, LL	2027.0	-242.4	-2.1	-1.6	194.3	Verified	Verified	53.2	99.0	D.N.P.	Verified	99.0	Verified
			Head	DL, LL	2009.4	223.9	1.8	-1.6	194.3	Verified	Verified	53.4	94.8	D.N.P.	Verified	94.8	Verified
			Head	DL, LL, E	2013.7	155.8	-4.9	7.2	114.9	Verified	Verified	30.7	78.5	D.N.P.	Verified	78.5	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL	2552.6	202.6	1.7	-1.2	134.5	Verified	Verified	37.3	100.0	D.N.P.	Verified	100.0	Verified
			Base	DL, LL, E	2031.4	-119.8	12.4	7.2	114.8	D.N.P.	D.N.P.	D.N.P.	80.2	D.N.P.	Verified	80.2	Verified
Foundations	-0.21/0.00	50x50	Base	DL, LL	2570.2	-120.2	-1.2	-1.2	134.5	D.N.P.	D.N.P.	D.N.P.	95.2	D.N.P.	Verified	95.2	Verified

2.4.- C4

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	333.6	-179.7	1.0	1.1	127.6	Verified	Verified	68.0	58.6	D.N.P.	Verified	68.0	Verified
			Base	DL, LL	384.0	-222.5	0.4	0.6	151.9	Verified	Verified	92.2	74.9	D.N.P.	Verified	92.2	Verified
Floor 4	9.00/12.00	50x50	Base	DL, LL, E	760.3	-172.2	0.4	0.5	143.8	Verified	Verified	83.9	62.9	D.N.P.	Verified	83.9	Verified
			Head	DL, LL, E	742.6	173.0	-0.8	0.5	143.8	Verified	Verified	91.0	62.5	D.N.P.	Verified	91.0	Verified
			Base	DL, LL	936.4	-224.7	-1.0	-0.9	187.0	Verified	Verified	94.6	80.0	D.N.P.	Verified	94.6	Verified
			Head	DL, LL	918.7	224.2	1.2	-0.9	187.0	Verified	Verified	96.2	79.3	D.N.P.	Verified	96.2	Verified
			Head	DL, LL, E	1169.3	180.3	-2.6	1.7	147.8	Verified	Verified	44.3	72.7	D.N.P.	Verified	72.7	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1169.4	180.3	-2.6	1.7	147.8	Verified	Verified	44.3	72.7	D.N.P.	Verified	72.7	Verified
			Head	DL, LL	1469.7	220.9	0.3	-0.4	182.4	Verified	Verified	57.8	89.7	D.N.P.	Verified	89.7	Verified
			Base	DL, LL, E	1614.9	-197.6	2.3	2.2	157.5	Verified	Verified	41.2	79.9	D.N.P.	Verified	79.9	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL, E	1597.2	180.5	-3.1	2.2	157.5	Verified	Verified	41.3	75.9	D.N.P.	Verified	75.9	Verified
			Base	DL, LL	2038.5	-244.5	-1.0	-0.7	195.6	Verified	Verified	53.5	99.6	D.N.P.	Verified	99.6	Verified
			Head	DL, LL	2020.8	225.0	0.8	-0.7	195.6	Verified	Verified	53.7	95.2	D.N.P.	Verified	95.2	Verified
			Head	DL, LL, E	2020.9	156.1	-3.4	4.3	113.7	Verified	Verified	28.7	77.7	D.N.P.	Verified	77.7	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL	2568.3	204.8	0.7	-0.5	136.2	Verified	Verified	35.7	99.4	D.N.P.	Verified	99.4	Verified
			Base	DL, LL, E	2038.7	-116.8	6.8	4.3	113.7	D.N.P.	D.N.P.	D.N.P.	79.7	D.N.P.	Verified	79.7	Verified
Foundations	-0.21/0.00	50x50	Base	DL, LL	2585.9	-121.9	-0.6	-0.5	136.2	D.N.P.	D.N.P.	D.N.P.	95.9	D.N.P.	Verified	95.9	Verified

2.5.- C5

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	322.3	-152.5	-6.1	-5.6	107.2	Verified	Verified	94.8	49.2	D.N.P.	Verified	94.8	Verified
			Base	DL, LL, E	322.3	-152.9	-1.1	-1.7	107.5	Verified	Verified	95.1	48.8	D.N.P.	Verified	95.1	Verified
			Base	DL, LL	364.7	-180.5	-0.5	-1.5	121.3	Verified	Verified	73.3	57.5	D.N.P.	Verified	73.3	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	713.4	157.6	4.9	-4.0	130.1	Verified	Verified	68.7	58.4	D.N.P.	Verified	68.7	Verified
			Head	DL, LL	866.9	191.5	-5.1	3.6	159.2	Verified	Verified	94.7	70.8	D.N.P.	Verified	94.7	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1124.3	162.2	9.0	-7.1	133.3	Verified	Verified	40.5	67.5	D.N.P.	Verified	67.5	Verified
			Head	DL, LL	1387.4	185.9	-2.3	2.0	153.8	Verified	Verified	49.7	78.6	D.N.P.	Verified	78.6	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1554.4	-179.4	-10.3	-7.8	142.5	Verified	Verified	39.2	80.8	D.N.P.	Verified	80.8	Verified
			Head	DL, LL, E	1536.7	162.5	8.5	-7.8	142.5	Verified	Verified	39.3	76.1	D.N.P.	Verified	76.1	Verified
			Base	DL, LL	1926.5	-208.0	1.5	1.6	166.4	Verified	Verified	48.2	96.0	D.N.P.	Verified	96.0	Verified
			Head	DL, LL	1908.8	191.4	-2.4	1.6	166.4	Verified	Verified	48.3	91.7	D.N.P.	Verified	91.7	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL, E	1945.3	135.8	5.2	-6.9	101.2	Verified	Verified	23.6	79.4	D.N.P.	Verified	79.4	Verified
			Head	DL, LL	2428.9	174.0	-0.4	0.2	115.8	Verified	Verified	28.2	99.3	D.N.P.	Verified	99.3	Verified
Foundations	-0.19/0.00	50x50	Base	DL, LL, E	1963.2	-106.9	-11.3	-6.9	101.1	D.N.P.	D.N.P.	D.N.P.	75.8	D.N.P.	Verified	75.8	Verified
			Base	DL, LL	2446.6	-103.8	0.1	0.2	115.8	D.N.P.	D.N.P.	D.N.P.	89.4	D.N.P.	Verified	89.4	Verified



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2.6.- C6

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	159.1	-88.1	84.3	60.5	66.5	Verified	Verified	79.9	52.2	D.N.P.	Verified	79.9	Verified
			Base	DL, LL	176.3	-99.9	102.4	71.5	70.9	Verified	Verified	61.0	61.5	D.N.P.	Verified	61.5	Verified
			Head	DL, LL	158.6	70.2	-69.2	71.5	70.9	Verified	Verified	96.1	41.5	D.N.P.	Verified	96.1	Verified
Floor 4	9.00/12.00	50x50	12.00 m	DL, LL, E	159.1	-88.1	84.3	60.5	66.5	D.N.P.	D.N.P.	D.N.P.	52.2	D.N.P.	Verified	52.2	Verified
			Head	DL, LL, E	359.9	59.8	-85.3	70.0	52.4	Verified	Verified	50.5	43.3	D.N.P.	Verified	50.5	Verified
			12.00 m	DL, LL	176.3	-99.9	102.4	71.5	70.9	D.N.P.	D.N.P.	D.N.P.	61.5	D.N.P.	Verified	61.5	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL	432.1	88.6	-95.4	80.3	75.2	Verified	Verified	57.4	54.6	D.N.P.	Verified	57.4	Verified
			Head	DL, LL, E	591.1	88.8	-79.0	64.5	71.9	Verified	Verified	34.3	52.6	D.N.P.	Verified	52.6	Verified
			Head	DL, LL	704.9	93.4	-98.1	80.5	76.7	Verified	Verified	43.1	60.6	D.N.P.	Verified	60.6	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	834.4	-98.4	85.3	67.8	75.9	Verified	Verified	33.5	59.7	D.N.P.	Verified	59.7	Verified
			Head	DL, LL, E	816.7	83.8	-77.4	67.8	75.9	Verified	Verified	33.6	53.2	D.N.P.	Verified	53.2	Verified
			Base	DL, LL	995.5	-103.5	107.0	85.5	81.9	Verified	Verified	42.1	68.9	D.N.P.	Verified	68.9	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL	977.8	93.1	-98.2	85.5	81.9	Verified	Verified	42.3	63.3	D.N.P.	Verified	63.3	Verified
			3.00 m	DL, LL, E	834.4	-98.4	85.3	67.8	75.9	D.N.P.	D.N.P.	D.N.P.	59.7	D.N.P.	Verified	59.7	Verified
			Head	DL, LL, E	1038.5	67.8	-69.7	48.5	58.2	Verified	Verified	23.5	51.5	D.N.P.	Verified	51.5	Verified
Foundations	-0.15/0.00	50x50	3.00 m	DL, LL	995.5	-103.5	107.0	85.5	81.9	D.N.P.	D.N.P.	D.N.P.	68.9	D.N.P.	Verified	68.9	Verified
			Head	DL, LL	1248.1	88.2	-90.5	60.3	58.7	Verified	Verified	28.0	64.7	D.N.P.	Verified	64.7	Verified
			Base	DL, LL, E	1056.1	-71.8	46.8	48.5	58.2	D.N.P.	D.N.P.	D.N.P.	48.3	D.N.P.	Verified	48.3	Verified
			Base	DL, LL	1265.8	-52.7	54.1	60.3	58.7	D.N.P.	D.N.P.	D.N.P.	51.2	D.N.P.	Verified	51.2	Verified

2.7.- C7

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	220.3	80.2	-63.6	-46.6	-53.1	Verified	Verified	59.5	41.5	D.N.P.	Verified	59.5	Verified
			Base	DL, LL	254.3	70.1	-84.3	-60.3	-44.6	Verified	Verified	70.9	44.6	D.N.P.	Verified	70.9	Verified
			Head	DL, LL, E	439.0	-113.6	44.2	-38.1	-91.6	Verified	Verified	69.5	47.8	D.N.P.	Verified	69.5	Verified
Floor 4	9.00/12.00	50x50	Base	DL, LL	576.4	83.1	-71.4	-58.9	-70.1	Verified	Verified	37.1	49.0	D.N.P.	Verified	49.0	Verified
			Head	DL, LL	558.8	-85.3	69.9	-58.9	-70.1	Verified	Verified	37.3	48.9	D.N.P.	Verified	48.9	Verified
			Head	DL, LL, E	663.0	-121.6	47.7	-38.6	-99.4	Verified	Verified	37.0	55.4	D.N.P.	Verified	55.4	Verified
Floor 3	6.00/9.00	50x50	Head	DL, E	429.2	-100.1	28.2	-22.8	-81.6	Verified	Verified	52.9	40.5	D.N.P.	Verified	52.9	Verified
			Head	DL, LL	874.9	-79.2	70.7	-57.7	-65.4	Verified	Verified	32.1	51.3	D.N.P.	Verified	51.3	Verified
			Base	DL, LL, E	897.0	133.6	-43.3	-36.0	-108.3	Verified	Verified	36.8	60.4	D.N.P.	Verified	60.4	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL, E	879.3	-126.3	43.1	-36.0	-108.3	Verified	Verified	37.0	58.0	D.N.P.	Verified	58.0	Verified
			Base	DL, LL	1202.8	86.8	-67.3	-55.1	-70.1	Verified	Verified	30.1	58.6	D.N.P.	Verified	58.6	Verified
			Head	DL, LL	1185.2	-81.5	64.9	-55.1	-70.1	Verified	Verified	30.2	56.6	D.N.P.	Verified	56.6	Verified
Floor 1	0.00/3.00	50x50	3.00 m	DL, LL, E	897.0	133.6	-43.3	-36.0	-108.3	D.N.P.	D.N.P.	D.N.P.	60.4	D.N.P.	Verified	60.4	Verified
			Head	DL, LL, E	1096.0	-96.2	37.3	-23.2	-82.8	Verified	Verified	26.3	53.0	D.N.P.	Verified	53.0	Verified
			Head	DL, LL	1490.5	-70.3	53.3	-35.4	-47.7	Verified	Verified	18.8	60.0	D.N.P.	Verified	60.0	Verified
Foundations	-0.17/0.00	50x50	Head	DL, LL, W	1176.5	-65.9	38.4	-25.9	-49.6	Verified	Verified	19.0	48.7	D.N.P.	Verified	48.7	Verified
			Base	DL, LL, E	1113.6	102.5	-18.3	-23.2	-82.8	D.N.P.	D.N.P.	D.N.P.	52.5	D.N.P.	Verified	52.5	Verified
			Base	DL, LL	1508.1	44.3	-31.7	-35.4	-47.7	D.N.P.	D.N.P.	D.N.P.	55.1	D.N.P.	Verified	55.1	Verified

2.8.- C8

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	40x30	Base	DL, LL, E	369.4	9.4	13.8	8.9	-1.1	Verified	Verified	6.7	32.0	D.N.P.	Verified	32.0	Verified
			Head	DL, E	257.0	6.4	-7.3	8.7	0.1	Verified	Verified	7.0	21.1	D.N.P.	Verified	21.1	Verified
			Base	DL, LL	409.2	12.5	1.1	1.1	-4.0	Verified	Verified	2.8	32.0	D.N.P.	Verified	32.0	Verified
Floor 4	9.00/12.00	40x30	Head	DL, LL	400.7	10.3	-1.4	1.1	-4.0	Verified	Verified	2.8	30.5	D.N.P.	Verified	30.5	Verified
			Head	DL, LL, E	611.4	-28.8	18.7	-14.6	-19.7	Verified	Verified	13.9	59.6	D.N.P.	Verified	59.6	Verified
			Head	DL, LL	762.5	-35.9	0.0	0.1	-23.9	Verified	Verified	13.1	67.3	D.N.P.	Verified	67.3	Verified
Floor 3	6.00/9.00	40x30	Base	DL, LL, E	895.5	25.6	24.5	19.6	-14.2	Verified	Verified	13.0	75.0	D.N.P.	Verified	75.0	Verified
			Head	DL, E	579.3	-15.5	-24.2	19.3	-8.5	Verified	Verified	13.5	51.7	D.N.P.	Verified	51.7	Verified
			Base	DL, LL	1145.7	34.6	1.4	1.0	-20.4	Verified	Verified	9.7	89.1	D.N.P.	Verified	89.1	Verified
Floor 2	3.00/6.00	40x30	Head	DL, LL	1136.8	-34.2	-1.2	1.0	-20.4	Verified	Verified	9.8	88.4	D.N.P.	Verified	88.4	Verified
			Base	DL, LL, E	1175.4	35.7	26.1	20.5	-15.2	Verified	Verified	11.7	80.4	D.N.P.	Verified	80.4	Verified
			Head	DL, E	752.3	-20.9	-24.5	19.9	-9.2	Verified	Verified	12.0	53.5	D.N.P.	Verified	53.5	Verified
Floor 1	0.00/3.00	40x30	Base	DL, LL	1532.7	50.6	2.9	2.0	-21.9	Verified	Verified	9.5	100.0	D.N.P.	Verified	100.0	Verified
			Head	DL, LL	1523.8	-50.2	-2.2	2.0	-21.9	Verified	Verified	9.5	99.3	D.N.P.	Verified	99.3	Verified
			Base	DL, LL, E	1476.3	48.1	17.1	13.3	-8.1	Verified	Verified	7.2	74.7	D.N.P.	Verified	74.7	Verified
Foundations	-0.22/0.00	40x30	Head	DL, E	937.5	-27.0	-15.3	12.7	-5.8	Verified	Verified	7.7	47.5	D.N.P.	Verified	47.5	Verified
			Base	DL, LL	1945.2	71.5	1.7	1.8	-14.0	Verified	Verified	5.6	98.2	D.N.P.	Verified	98.2	Verified
			Head	DL, LL	1936.3	-71.0	-2.7	1.8	-14.0	Verified	Verified	5.6	97.7	D.N.P.	Verified	97.7	Verified
			Base	DL, LL, E	1476.3	48.1	17.1	13.3	-8.1	D.N.P.	D.N.P.	D.N.P.	74.7	D.N.P.	Verified	74.7	Verified
			Base	DL, LL	1945.2	71.5	1.7	1.8	-14.0	D.N.P.	D.N.P.	D.N.P.	98.2	D.N.P.	Verified	98.2	Verified



U.L.S. Checks

edificio 2.0

Date: 11/20/20

2.9.- C9

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	Status
techo	12.00/15.00	50x50	Base	DL, LL, E	367.7	112.5	46.0	31.8	-73.7	Verified	Verified	63.0	47.1	D.N.P.	Verified	63.0	Verified
			Base	DL, LL, E	368.6	115.2	43.0	29.7	-75.6	Verified	Verified	64.8	46.9	D.N.P.	Verified	64.8	Verified
			Base	DL, LL	437.8	127.4	42.0	28.6	-80.7	Verified	Verified	76.9	50.7	D.N.P.	Verified	76.9	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	681.5	-150.7	-43.7	35.6	-122.6	Verified	Verified	66.6	62.1	D.N.P.	Verified	66.6	Verified
			Head	DL, LL	895.6	-158.1	-41.4	33.8	-130.0	Verified	Verified	49.1	67.4	D.N.P.	Verified	67.4	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1008.9	-153.0	-38.6	31.4	-125.6	Verified	Verified	40.5	66.8	D.N.P.	Verified	66.8	Verified
			Head	DL, LL	1369.1	-146.2	-36.1	29.3	-120.9	Verified	Verified	40.3	70.8	D.N.P.	Verified	70.8	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1352.2	166.7	31.1	26.2	-135.1	Verified	Verified	39.5	75.5	D.N.P.	Verified	75.5	Verified
			Head	DL, LL, E	1334.6	-157.5	-31.8	26.2	-135.1	Verified	Verified	39.7	72.7	D.N.P.	Verified	72.7	Verified
			Base	DL, LL	1859.8	158.5	27.8	23.9	-128.4	Verified	Verified	38.3	84.5	D.N.P.	Verified	84.5	Verified
			Head	DL, LL	1842.2	-149.6	-29.6	23.9	-128.4	Verified	Verified	38.4	82.2	D.N.P.	Verified	82.2	Verified
Floor 1	0.00/3.00	50x50	3.00 m	DL, LL, E	1352.2	166.7	31.1	26.2	-135.1	D.N.P.	D.N.P.	D.N.P.	75.5	D.N.P.	Verified	75.5	Verified
			Head	DL, LL, E	1669.5	-125.4	-18.1	13.7	-98.5	Verified	Verified	26.7	71.5	D.N.P.	Verified	71.5	Verified
			Head	DL, LL	2321.4	-128.5	-18.7	12.6	-86.4	Verified	Verified	23.6	90.3	D.N.P.	Verified	90.3	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1884.8	8.1	-3.8	0.8	-29.2	D.N.P.	D.N.P.	D.N.P.	69.5	D.N.P.	Verified	69.5	Verified
			Base	DL, LL	2339.0	78.8	11.4	12.6	-86.4	D.N.P.	D.N.P.	D.N.P.	85.5	D.N.P.	Verified	85.5	Verified

2.10.- C10

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	Status
techo	12.00/15.00	50x50	Base	DL, LL, E	343.5	145.9	-19.2	-14.0	-95.4	Verified	Verified	84.4	49.1	D.N.P.	Verified	84.4	Verified
			Base	DL, LL	391.1	164.2	-19.6	-14.2	-105.9	Verified	Verified	63.9	55.0	D.N.P.	Verified	63.9	Verified
			Head	DL, LL	373.5	-90.0	14.4	-14.2	-105.9	Verified	Verified	72.2	34.0	D.N.P.	Verified	72.2	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	529.8	-185.7	16.6	-13.5	-152.6	Verified	Verified	78.5	62.0	D.N.P.	Verified	78.5	Verified
			Head	DL, LL	740.0	-193.4	14.7	-12.2	-158.8	Verified	Verified	86.0	68.3	D.N.P.	Verified	86.0	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	718.8	-186.1	15.9	-12.6	-153.4	Verified	Verified	73.0	66.3	D.N.P.	Verified	73.0	Verified
			Head	DL, LL, E	715.5	-186.2	16.2	-12.8	-153.5	Verified	Verified	73.2	66.2	D.N.P.	Verified	73.2	Verified
			Head	DL, LL	1125.4	-175.6	12.7	-10.1	-144.1	Verified	Verified	49.7	71.5	D.N.P.	Verified	71.5	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	926.2	186.4	-10.5	-9.4	-154.3	Verified	Verified	49.5	71.1	D.N.P.	Verified	71.1	Verified
			Base	DL, E	500.3	142.1	-8.7	-7.6	-117.2	Verified	Verified	92.1	48.3	D.N.P.	Verified	92.1	Verified
			Head	DL, LL	1556.7	-162.5	8.1	-6.0	-134.7	Verified	Verified	41.9	76.6	D.N.P.	Verified	76.6	Verified
Floor 1	0.00/3.00	50x50	Base	DL, LL, E	2034.0	-3.2	6.8	4.5	-14.5	Verified	Verified	3.8	75.1	D.N.P.	Verified	75.1	Verified
			Head	DL, LL, E	1169.0	-133.7	5.6	-5.4	-100.9	Verified	Verified	30.3	60.2	D.N.P.	Verified	60.2	Verified
			Head	DL, LL	2085.1	-118.7	3.1	-1.9	-79.7	Verified	Verified	22.4	81.2	D.N.P.	Verified	81.2	Verified
			Head	DL, LL, W	1480.7	-100.9	2.1	-1.7	-71.2	Verified	Verified	22.5	60.8	D.N.P.	Verified	60.8	Verified
Foundations	-0.15/0.00	50x50	Base	DL, LL, E	2034.0	-3.2	6.8	4.5	-14.5	D.N.P.	D.N.P.	D.N.P.	75.1	D.N.P.	Verified	75.1	Verified
			Base	DL, LL	2102.7	72.6	-1.6	-1.9	-79.7	D.N.P.	D.N.P.	D.N.P.	76.8	D.N.P.	Verified	76.8	Verified

2.11.- C11

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	Status
techo	12.00/15.00	40x30	Base	DL, LL, E	288.2	15.9	-12.8	-7.7	-8.9	Verified	Verified	8.3	31.8	D.N.P.	Verified	31.8	Verified
			Head	DL, LL, E	279.3	-7.6	6.5	-7.7	-8.9	Verified	Verified	8.3	22.7	D.N.P.	Verified	22.7	Verified
			Base	DL, LL	323.1	22.3	-1.5	-0.9	-12.4	Verified	Verified	8.6	34.1	D.N.P.	Verified	34.1	Verified
			Head	DL, LL	314.2	-10.5	0.8	-0.9	-12.4	Verified	Verified	8.7	25.1	D.N.P.	Verified	25.1	Verified
Floor 4	9.00/12.00	40x30	Head	DL, LL, E	511.3	-23.5	22.9	-18.0	-16.7	Verified	Verified	15.3	53.0	D.N.P.	Verified	53.0	Verified
			Head	DL, LL	640.7	-33.6	1.9	-1.5	-23.4	Verified	Verified	13.6	59.2	D.N.P.	Verified	59.2	Verified
Floor 3	6.00/9.00	40x30	Base	DL, LL, E	758.5	21.8	-24.9	-20.0	-15.2	Verified	Verified	14.2	65.4	D.N.P.	Verified	65.4	Verified
			Head	DL, E	485.6	-13.0	24.8	-19.7	-9.4	Verified	Verified	14.7	45.9	D.N.P.	Verified	45.9	Verified
			Base	DL, LL	983.7	31.7	-1.2	-1.0	-21.1	Verified	Verified	10.6	77.8	D.N.P.	Verified	77.8	Verified
			Head	DL, LL	974.9	-32.2	1.4	-1.0	-21.1	Verified	Verified	10.6	77.6	D.N.P.	Verified	77.6	Verified
Floor 2	3.00/6.00	40x30	Base	DL, LL, E	1004.8	29.4	-24.8	-19.7	-15.5	Verified	Verified	11.8	79.6	D.N.P.	Verified	79.6	Verified
			Head	DL, E	636.7	-17.2	24.2	-19.5	-9.5	Verified	Verified	12.2	53.1	D.N.P.	Verified	53.1	Verified
			Base	DL, LL	1328.6	41.8	-0.6	-0.6	-21.5	Verified	Verified	9.8	99.9	D.N.P.	Verified	99.9	Verified
			Head	DL, LL	1319.8	-41.4	0.8	-0.6	-21.5	Verified	Verified	9.8	99.2	D.N.P.	Verified	99.2	Verified
Floor 1	0.00/3.00	40x30	Base	DL, LL, E	1283.6	40.0	1.3	1.0	-4.8	Verified	Verified	2.2	74.3	D.N.P.	Verified	74.3	Verified
			Head	DL, E	796.1	-22.3	14.3	-12.1	-6.0	Verified	Verified	7.7	46.3	D.N.P.	Verified	46.3	Verified
			Base	DL, LL	1691.6	58.2	-0.1	-0.2	-13.5	Verified	Verified	6.1	98.8	D.N.P.	Verified	98.8	Verified
			Head	DL, LL	1682.7	-57.7	0.3	-0.2	-13.5	Verified	Verified	6.1	98.2	D.N.P.	Verified	98.2	Verified
Foundations	-0.17/0.00	40x30	Base	DL, LL, E	1283.6	40.0	1.3	1.0	-4.8	D.N.P.	D.N.P.	D.N.P.	74.3	D.N.P.	Verified	74.3	Verified
			Base	DL, LL	1691.6	58.2	-0.1	-0.2	-13.5	D.N.P.	D.N.P.	D.N.P.	98.8	D.N.P.	Verified	98.8	Verified



2.12.- C12

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	363.5	127.6	23.8	17.4	-85.8	Verified	Verified	74.2	45.2	D.N.P.	Verified	74.2	Verified
			Base	DL, LL, E	369.1	130.3	15.7	11.6	-87.7	Verified	Verified	75.7	44.3	D.N.P.	Verified	75.7	Verified
			Base	DL, LL	424.9	148.0	20.2	14.6	-96.8	Verified	Verified	94.8	50.9	D.N.P.	Verified	94.8	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	694.7	-146.8	-23.7	19.2	-120.5	Verified	Verified	43.5	57.9	D.N.P.	Verified	57.9	Verified
			Head	DL, LL, E	705.7	-151.9	-10.0	8.3	-124.5	Verified	Verified	55.4	57.3	D.N.P.	Verified	57.3	Verified
			Head	DL, LL	895.0	-168.3	-15.3	12.6	-138.8	Verified	Verified	51.0	65.9	D.N.P.	Verified	65.9	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	1060.9	-151.7	-8.4	6.7	-124.7	Verified	Verified	38.5	63.3	D.N.P.	Verified	63.3	Verified
			Head	DL, LL	1385.0	-158.2	-13.6	10.8	-130.4	Verified	Verified	42.3	71.9	D.N.P.	Verified	71.9	Verified
			Base	DL, LL, E	1436.3	159.1	2.8	2.9	-129.1	Verified	Verified	36.4	72.5	D.N.P.	Verified	72.5	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL, E	1418.6	-150.9	-4.1	2.9	-129.1	Verified	Verified	36.5	70.3	D.N.P.	Verified	70.3	Verified
			Base	DL, LL	1897.0	165.4	7.2	6.7	-134.7	Verified	Verified	39.3	85.6	D.N.P.	Verified	85.6	Verified
			Head	DL, LL	1879.4	-157.9	-9.0	6.7	-134.7	Verified	Verified	39.4	83.5	D.N.P.	Verified	83.5	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL, E	1927.2	-95.4	19.9	-23.6	-64.8	Verified	Verified	17.6	73.0	D.N.P.	Verified	73.0	Verified
			Head	DL, LL, E	1792.0	-117.5	0.2	-0.8	-88.6	Verified	Verified	23.2	72.7	D.N.P.	Verified	72.7	Verified
			Head	DL, LL	2391.1	-132.8	-3.3	2.3	-88.9	Verified	Verified	23.8	92.5	D.N.P.	Verified	92.5	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1944.8	60.2	-36.7	-23.6	-64.8	D.N.P.	D.N.P.	D.N.P.	71.8	D.N.P.	Verified	71.8	Verified
			Base	DL, LL	2408.7	80.6	2.2	2.3	-88.9	D.N.P.	D.N.P.	D.N.P.	88.0	D.N.P.	Verified	88.0	Verified

2.13.- C13

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	320.9	53.3	-13.5	-9.5	-33.2	Verified	Verified	13.6	22.9	D.N.P.	Verified	22.9	Verified
			Head	DL, LL, E	303.2	-26.4	9.2	-9.4	-33.2	Verified	Verified	13.7	14.5	D.N.P.	Verified	14.5	Verified
			Base	DL, LL	360.5	55.2	3.2	1.8	-32.7	Verified	Verified	14.4	22.5	D.N.P.	Verified	22.5	Verified
			Head	DL, LL	342.9	-23.2	-1.2	1.8	-32.7	Verified	Verified	14.5	14.1	D.N.P.	Verified	14.5	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	572.3	-86.4	20.6	-16.5	-69.1	Verified	Verified	25.4	37.5	D.N.P.	Verified	37.5	Verified
			Head	DL, LL	718.7	-79.6	-5.2	4.2	-64.9	Verified	Verified	25.1	36.5	D.N.P.	Verified	36.5	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	847.2	-84.0	23.4	-19.3	-69.0	Verified	Verified	23.5	42.4	D.N.P.	Verified	42.4	Verified
			Head	DL, LL, E	847.1	-83.9	23.4	-19.3	-69.0	Verified	Verified	23.5	42.4	D.N.P.	Verified	42.4	Verified
			Base	DL, LL	1119.9	69.8	4.5	3.8	-58.7	Verified	Verified	20.2	44.9	D.N.P.	Verified	44.9	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL	1102.2	-71.0	-4.6	3.8	-58.7	Verified	Verified	20.3	44.6	D.N.P.	Verified	44.6	Verified
			Base	DL, LL, E	1146.5	92.7	-23.9	-19.3	-73.9	Verified	Verified	23.0	51.6	D.N.P.	Verified	51.6	Verified
			Head	DL, LL, E	1128.8	-84.6	22.4	-19.3	-73.9	Verified	Verified	23.1	49.2	D.N.P.	Verified	49.2	Verified
			Base	DL, LL	1512.9	77.4	5.0	4.1	-62.8	Verified	Verified	19.8	57.4	D.N.P.	Verified	57.4	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL	1495.3	-73.3	-4.7	4.1	-62.8	Verified	Verified	19.8	56.1	D.N.P.	Verified	56.1	Verified
			Base	DL, LL, E	1576.8	22.9	43.3	31.0	-27.3	Verified	Verified	11.3	58.2	D.N.P.	Verified	58.2	Verified
			Head	DL, LL, E	1424.8	-61.5	11.8	-12.7	-52.0	Verified	Verified	15.1	52.6	D.N.P.	Verified	52.6	Verified
			Base	DL, LL	1922.4	38.7	2.6	2.7	-42.5	Verified	Verified	12.4	70.2	D.N.P.	Verified	70.2	Verified
Foundations	-0.17/0.00	50x50	Head	DL, LL, W	1468.8	-52.1	-3.3	2.6	-39.0	Verified	Verified	12.4	53.7	D.N.P.	Verified	53.7	Verified
			Base	DL, LL, E	1576.8	22.9	43.3	31.0	-27.3	D.N.P.	D.N.P.	D.N.P.	58.2	D.N.P.	Verified	58.2	Verified
			Base	DL, LL	1922.4	38.7	2.6	2.7	-42.5	D.N.P.	D.N.P.	D.N.P.	70.2	D.N.P.	Verified	70.2	Verified

2.14.- C14

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	106.9	57.6	-3.5	-2.3	-39.4	Verified	Verified	35.3	19.2	D.N.P.	Verified	35.3	Verified
			Base	DL, LL, E	107.0	57.6	-3.5	-2.2	-39.5	Verified	Verified	35.3	19.2	D.N.P.	Verified	35.3	Verified
			Base	DL, LL	139.9	49.9	10.3	6.3	-32.3	Verified	Verified	31.9	17.8	D.N.P.	Verified	31.9	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	208.1	-74.2	12.2	-9.2	-57.1	Verified	Verified	48.6	25.9	D.N.P.	Verified	48.6	Verified
			Head	DL, LL	333.0	-53.6	-13.1	10.4	-42.6	Verified	Verified	19.5	23.1	D.N.P.	Verified	23.1	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	312.3	-79.0	15.6	-12.4	-61.9	Verified	Verified	45.6	30.1	D.N.P.	Verified	45.6	Verified
			Base	DL, LL	565.3	50.2	13.2	10.5	-40.8	Verified	Verified	17.1	26.7	D.N.P.	Verified	26.7	Verified
			Head	DL, LL	547.0	-51.9	-13.0	10.5	-40.8	Verified	Verified	17.3	26.6	D.N.P.	Verified	26.6	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	891.1	15.2	47.2	35.3	-12.1	Verified	Verified	12.1	34.8	D.N.P.	Verified	34.8	Verified
			Base	DL, E	220.9	70.6	-19.8	-15.4	-53.4	Verified	Verified	44.9	26.9	D.N.P.	Verified	44.9	Verified
			Base	DL, LL	785.5	55.2	18.8	13.9	-43.0	Verified	Verified	17.1	33.8	D.N.P.	Verified	33.8	Verified
			Head	DL, LL	767.1	-52.3	-16.0	13.9	-43.0	Verified	Verified	17.2	32.5	D.N.P.	Verified	32.5	Verified
Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1154.8	2.9	39.7	27.3	-8.5	Verified	Verified	8.6	42.6	D.N.P.	Verified	42.6	Verified
			Base	DL, LL, E	551.9	66.0	-13.6	-6.9	-47.5	Verified	Verified	17.3	30.4	D.N.P.	Verified	30.4	Verified
			Head	DL, LL	1000.2	-44.7	-16.6	10.5	-28.3	Verified	Verified	10.7	37.4	D.N.P.	Verified	37.4	Verified
			Head	DL, LL, W	790.8	-37.0	-9.4	6.3	-28.0	Verified	Verified	10.8	29.6	D.N.P.	Verified	29.6	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1154.8	2.9	39.7	27.3	-8.5	D.N.P.	D.N.P.	D.N.P.	42.6	D.N.P.	Verified	42.6	Verified
			Base	DL, LL	1018.6	26.1	9.8	10.5	-28.3	D.N.P.	D.N.P.	D.N.P.	37.2	D.N.P.	Verified	37.2	Verified



2.15.- C15

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	211.5	-32.9	-104.3	-83.1	22.4	Verified	Verified	73.4	40.1	D.N.P.	Verified	73.4	Verified
			Base	DL, LL, E	212.6	-6.2	-109.0	-87.3	4.4	Verified	Verified	76.7	35.5	D.N.P.	Verified	76.7	Verified
			Base	DL, LL	226.3	-2.9	-123.1	-94.2	2.3	Verified	Verified	94.5	40.7	D.N.P.	Verified	94.5	Verified
Floor 4	9.00/12.00	50x50	12.00 m	DL, LL, E	211.5	-32.9	-104.3	-83.1	22.4	D.N.P.	D.N.P.	D.N.P.	40.1	D.N.P.	Verified	40.1	Verified
			Head	DL, E	266.6	60.9	30.4	-28.1	48.5	Verified	Verified	31.8	27.8	D.N.P.	Verified	31.8	Verified
			12.00 m	DL, LL	226.3	-2.9	-123.1	-94.2	2.3	D.N.P.	D.N.P.	D.N.P.	40.7	D.N.P.	Verified	40.7	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL	447.2	2.7	73.6	-65.2	2.2	Verified	Verified	27.7	29.3	D.N.P.	Verified	29.3	Verified
			Head	DL, LL, E	571.8	75.6	73.6	-59.2	61.8	Verified	Verified	30.7	47.5	D.N.P.	Verified	47.5	Verified
			Head	DL, LL	683.5	2.3	92.5	-75.1	2.0	Verified	Verified	29.4	39.1	D.N.P.	Verified	39.1	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	775.1	-84.3	-71.5	-57.1	68.5	Verified	Verified	29.8	51.3	D.N.P.	Verified	51.3	Verified
			Head	DL, LL, E	757.4	80.1	65.5	-57.1	68.5	Verified	Verified	30.0	48.3	D.N.P.	Verified	48.3	Verified
			Base	DL, LL	935.6	-4.3	-91.4	-73.7	3.0	Verified	Verified	26.7	44.5	D.N.P.	Verified	44.5	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL	917.9	2.8	85.5	-73.7	3.0	Verified	Verified	26.8	42.7	D.N.P.	Verified	42.7	Verified
			3.00 m	DL, LL, E	775.1	-84.3	-71.5	-57.1	68.5	D.N.P.	D.N.P.	D.N.P.	51.3	D.N.P.	Verified	51.3	Verified
			Head	DL, LL, E	933.6	56.7	55.2	-40.1	55.1	Verified	Verified	21.8	43.9	D.N.P.	Verified	43.9	Verified
Foundations	-0.17/0.00	50x50	Head	DL, LL	1141.1	5.6	75.4	-50.1	2.8	Verified	Verified	17.2	46.6	D.N.P.	Verified	46.6	Verified
			Base	DL, LL, E	951.2	-75.7	-41.1	-40.1	55.1	D.N.P.	D.N.P.	D.N.P.	45.7	D.N.P.	Verified	45.7	Verified
			Base	DL, LL	1158.7	-1.2	-44.8	-50.1	2.8	D.N.P.	D.N.P.	D.N.P.	42.3	D.N.P.	Verified	42.3	Verified

2.16.- C16

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	319.7	-3.6	88.8	66.9	2.9	Verified	Verified	52.9	32.7	D.N.P.	Verified	52.9	Verified
			Base	DL, LL	347.9	-7.0	89.5	65.5	5.0	Verified	Verified	56.2	33.6	D.N.P.	Verified	56.2	Verified
			12.00 m	DL, LL, E	319.7	-3.6	88.8	66.9	2.9	D.N.P.	D.N.P.	D.N.P.	32.7	D.N.P.	Verified	32.7	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	509.7	3.1	-69.2	55.6	2.5	Verified	Verified	20.4	29.3	D.N.P.	Verified	29.3	Verified
			12.00 m	DL, LL	347.9	-7.0	89.5	65.5	5.0	D.N.P.	D.N.P.	D.N.P.	33.6	D.N.P.	Verified	33.6	Verified
			Head	DL, LL	625.1	6.5	-63.4	52.3	5.2	Verified	Verified	20.9	30.6	D.N.P.	Verified	30.6	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	737.2	-48.2	-62.0	48.3	-37.6	Verified	Verified	20.7	39.3	D.N.P.	Verified	39.3	Verified
			Head	DL, LL, E	719.6	3.4	-81.5	63.6	2.7	Verified	Verified	21.7	36.9	D.N.P.	Verified	36.9	Verified
			Base	DL, LL	941.7	-6.3	67.8	55.4	4.9	Verified	Verified	20.1	39.8	D.N.P.	Verified	39.8	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL	923.3	6.0	-70.8	55.4	4.9	Verified	Verified	20.2	39.6	D.N.P.	Verified	39.6	Verified
			Base	DL, LL, E	973.7	51.0	60.0	46.7	-40.5	Verified	Verified	19.5	44.6	D.N.P.	Verified	44.6	Verified
			Head	DL, LL, E	928.2	4.4	-75.3	62.6	4.1	Verified	Verified	20.1	40.6	D.N.P.	Verified	40.6	Verified
Floor 1	0.00/3.00	50x50	Base	DL, LL	1239.0	-9.4	68.2	53.6	6.6	Verified	Verified	18.1	48.2	D.N.P.	Verified	48.2	Verified
			Head	DL, LL	1220.6	7.2	-65.8	53.6	6.6	Verified	Verified	18.1	47.0	D.N.P.	Verified	47.0	Verified
			Base	DL, LL, E	1247.5	-2.8	-9.3	6.0	3.8	Verified	Verified	2.1	46.0	D.N.P.	Verified	46.0	Verified
Foundations	-0.17/0.00	50x50	Head	DL, E	761.0	-33.0	-28.3	21.2	-34.6	Verified	Verified	13.6	30.3	D.N.P.	Verified	30.3	Verified
			Base	DL, LL	1528.0	-3.8	30.9	33.4	5.3	Verified	Verified	10.6	55.8	D.N.P.	Verified	55.8	Verified
			Head	DL, LL	1509.6	9.5	-52.6	33.4	5.3	Verified	Verified	10.6	55.2	D.N.P.	Verified	55.2	Verified



2.17.- C17

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	191.4	-27.4	-67.5	-51.8	18.6	Verified	Verified	44.6	27.8	D.N.P.	Verified	44.6	Verified
			Base	DL, LL, E	193.0	-1.7	-72.8	-56.2	1.3	Verified	Verified	48.1	23.4	D.N.P.	Verified	48.1	Verified
			Base	DL, LL	208.4	4.5	-78.2	-58.1	-2.8	Verified	Verified	56.6	25.6	D.N.P.	Verified	56.6	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	357.3	57.2	46.4	-39.3	45.4	Verified	Verified	23.4	32.4	D.N.P.	Verified	32.4	Verified
			Head	DL, E	231.2	-62.1	13.4	-13.3	-49.5	Verified	Verified	38.3	23.5	D.N.P.	Verified	38.3	Verified
			12.00 m	DL, LL	208.4	4.5	-78.2	-58.1	-2.8	D.N.P.	D.N.P.	D.N.P.	25.6	D.N.P.	Verified	25.6	Verified
			Head	DL, LL	409.9	-4.3	54.5	-46.7	-3.5	Verified	Verified	20.2	23.9	D.N.P.	Verified	23.9	Verified
			Head	DL, LL, E	538.3	71.3	53.9	-43.3	58.3	Verified	Verified	26.3	40.5	D.N.P.	Verified	40.5	Verified
Floor 3	6.00/9.00	50x50	Head	DL, E	335.5	-76.1	18.0	-14.6	-62.1	Verified	Verified	37.1	30.4	D.N.P.	Verified	37.1	Verified
			Head	DL, LL	623.2	-4.0	59.2	-48.0	-3.2	Verified	Verified	19.2	29.7	D.N.P.	Verified	29.7	Verified
			Head	DL, LL, E	735.1	-79.2	-50.0	-40.5	64.5	Verified	Verified	25.8	44.2	D.N.P.	Verified	44.2	Verified
Floor 2	3.00/6.00	50x50	Head	DL, E	496.5	76.9	32.8	-28.3	65.5	Verified	Verified	26.3	36.5	D.N.P.	Verified	36.5	Verified
			Base	DL, LL	848.7	4.2	-53.8	-44.2	-3.5	Verified	Verified	16.5	34.2	D.N.P.	Verified	34.2	Verified
			Head	DL, LL	831.0	-4.3	52.4	-44.2	-3.5	Verified	Verified	16.5	33.6	D.N.P.	Verified	33.6	Verified
			3.00 m	DL, LL, E	735.1	-79.2	-50.0	-40.5	64.5	D.N.P.	D.N.P.	D.N.P.	44.2	D.N.P.	Verified	44.2	Verified
Floor 1	0.00/3.00	50x50	Head	DL, E	529.9	-54.4	14.9	-4.5	-54.7	Verified	Verified	19.9	27.0	D.N.P.	Verified	27.0	Verified
			Base	DL, LL	1049.5	3.5	-24.9	-28.1	-2.4	Verified	Verified	9.9	38.3	D.N.P.	Verified	38.3	Verified
			Head	DL, LL	1031.8	-2.3	42.5	-28.1	-2.4	Verified	Verified	9.9	37.7	D.N.P.	Verified	37.7	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL, E	908.9	-72.8	-33.1	-28.3	51.9	D.N.P.	D.N.P.	D.N.P.	42.8	D.N.P.	Verified	42.8	Verified
			Base	DL, LL	1049.5	3.5	-24.9	-28.1	-2.4	D.N.P.	D.N.P.	D.N.P.	38.3	D.N.P.	Verified	38.3	Verified

2.18.- C18

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	40x30	Base	DL, LL, E	397.5	10.3	14.2	9.0	-6.1	Verified	Verified	7.5	34.2	D.N.P.	Verified	34.2	Verified
			Head	DL, LL, E	388.7	-10.0	-8.4	9.0	-6.1	Verified	Verified	7.6	31.0	D.N.P.	Verified	31.0	Verified
			Base	DL	445.9	11.6	2.0	1.9	-6.4	Verified	Verified	4.4	33.9	D.N.P.	Verified	33.9	Verified
			Head	DL, LL	417.3	-10.8	-2.4	1.8	-6.4	Verified	Verified	4.5	31.8	D.N.P.	Verified	31.8	Verified
Floor 4	9.00/12.00	40x30	Base	DL, LL, E	592.9	15.9	22.5	18.1	-0.5	Verified	Verified	11.9	51.9	D.N.P.	Verified	51.9	Verified
			Head	DL, E	394.5	10.2	22.9	-17.9	1.1	Verified	Verified	13.2	38.7	D.N.P.	Verified	38.7	Verified
			Base	DL, LL	701.0	19.2	0.9	0.5	-0.6	Verified	Verified	0.5	53.4	D.N.P.	Verified	53.4	Verified
			Head	DL, W	397.5	10.3	2.4	-1.8	0.4	Verified	Verified	1.5	30.3	D.N.P.	Verified	30.3	Verified
Floor 3	6.00/9.00	40x30	Base	DL, LL, E	804.4	22.5	26.6	21.3	-1.5	Verified	Verified	12.7	69.1	D.N.P.	Verified	69.1	Verified
			Head	DL, E	532.2	-14.1	-26.3	21.0	-1.1	Verified	Verified	14.2	49.7	D.N.P.	Verified	49.7	Verified
			Base	DL, LL	992.0	28.9	1.5	1.2	-1.6	Verified	Verified	1.1	76.5	D.N.P.	Verified	76.5	Verified
			Head	DL, LL, W	790.1	-22.1	-3.9	3.1	-0.9	Verified	Verified	2.1	60.6	D.N.P.	Verified	60.6	Verified
Floor 2	3.00/6.00	40x30	Base	DL, LL, E	1027.9	30.2	27.4	21.6	-1.5	Verified	Verified	12.5	84.6	D.N.P.	Verified	84.6	Verified
			Head	DL, E	671.6	-18.3	-26.1	21.2	-1.0	Verified	Verified	14.2	58.4	D.N.P.	Verified	58.4	Verified
			Base	DL, LL	1297.0	40.5	2.2	1.6	-1.6	Verified	Verified	1.2	99.0	D.N.P.	Verified	99.0	Verified
			Head	DL, LL, W	1010.1	-29.6	-4.3	3.6	-0.8	Verified	Verified	2.4	76.1	D.N.P.	Verified	76.1	Verified
Floor 1	0.00/3.00	40x30	Base	DL, LL, E	1271.0	39.5	17.6	13.6	-1.0	Verified	Verified	6.9	77.3	D.N.P.	Verified	77.3	Verified
			Head	DL, E	823.9	-23.2	-16.0	13.3	-0.7	Verified	Verified	7.9	50.4	D.N.P.	Verified	50.4	Verified
			Base	DL, LL	1627.2	55.0	1.3	1.3	-1.1	Verified	Verified	0.8	98.1	D.N.P.	Verified	98.1	Verified
			Head	DL, LL, W	1247.3	-38.5	-1.9	1.4	-2.9	Verified	Verified	1.6	73.6	D.N.P.	Verified	73.6	Verified
Foundations	-0.15/0.00	40x30	Base	DL, LL, E	1271.0	39.5	17.6	13.6	-1.0	D.N.P.	D.N.P.	D.N.P.	77.3	D.N.P.	Verified	77.3	Verified
			Base	DL, LL	1627.2	55.0	1.3	1.3	-1.1	D.N.P.	D.N.P.	D.N.P.	98.1	D.N.P.	Verified	98.1	Verified



U.L.S. Checks

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Date: 11/20/20

2.19.- C19

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	308.5	-6.9	58.0	39.2	4.8	Verified	Verified	15.7	23.6	D.N.P.	Verified	23.6	Verified
			Base	DL, E	217.5	-6.1	47.5	32.1	4.2	Verified	Verified	17.5	18.7	D.N.P.	Verified	18.7	Verified
			Base	DL, LL	352.5	-3.2	39.1	26.3	2.3	Verified	Verified	11.7	18.3	D.N.P.	Verified	18.3	Verified
			Head	DL, LL	334.9	2.3	-24.0	26.3	2.3	Verified	Verified	11.7	14.0	D.N.P.	Verified	14.0	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	489.7	11.9	-70.9	55.1	9.2	Verified	Verified	20.6	30.4	D.N.P.	Verified	30.4	Verified
			Base	DL, LL	643.2	-3.6	36.1	29.4	2.9	Verified	Verified	11.7	25.1	D.N.P.	Verified	25.1	Verified
			Head	DL, LL	624.8	3.5	-37.5	29.4	2.9	Verified	Verified	11.8	24.8	D.N.P.	Verified	24.8	Verified
			Head	DL, LL, E	737.5	-48.2	-42.9	33.6	-37.6	Verified	Verified	17.1	35.2	D.N.P.	Verified	35.2	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	685.3	2.0	-74.3	58.4	1.6	Verified	Verified	20.1	34.3	D.N.P.	Verified	34.3	Verified
			Base	DL, LL	931.4	-3.3	30.8	25.4	2.6	Verified	Verified	9.2	34.0	D.N.P.	Verified	34.0	Verified
			Head	DL, LL	913.0	3.2	-32.7	25.4	2.6	Verified	Verified	9.3	33.4	D.N.P.	Verified	33.4	Verified
			Base	DL, LL, E	960.5	54.5	40.2	31.9	-42.6	Verified	Verified	16.9	41.2	D.N.P.	Verified	41.2	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL, E	871.3	1.2	-68.6	55.8	0.9	Verified	Verified	18.1	37.5	D.N.P.	Verified	37.5	Verified
			Base	DL, LL	1215.9	-2.2	24.9	20.6	1.7	Verified	Verified	6.9	44.4	D.N.P.	Verified	44.4	Verified
			Head	DL, LL, W	946.1	1.8	-25.9	20.3	1.5	Verified	Verified	7.3	34.6	D.N.P.	Verified	34.6	Verified
			Base	DL, LL, E	1297.3	-0.5	-33.1	-19.5	0.8	Verified	Verified	5.7	47.9	D.N.P.	Verified	47.9	Verified
Floor 1	0.00/3.00	50x50	Head	DL, E	743.8	-35.4	-20.4	17.9	-36.1	Verified	Verified	13.6	29.2	D.N.P.	Verified	29.2	Verified
			Base	DL, LL	1498.5	0.6	10.0	10.5	0.5	Verified	Verified	3.3	54.8	D.N.P.	Verified	54.8	Verified
			Head	DL, LL, W	1172.2	-9.9	-12.8	8.6	-10.7	Verified	Verified	4.7	42.8	D.N.P.	Verified	42.8	Verified
			Base	DL, LL, E	1297.3	-0.5	-33.1	-19.5	0.8	D.N.P.	D.N.P.	D.N.P.	47.9	D.N.P.	Verified	47.9	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL	1498.5	0.6	10.0	10.5	0.5	D.N.P.	D.N.P.	D.N.P.	54.8	D.N.P.	Verified	54.8	Verified

2.20.- C20

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	246.5	-57.8	-26.9	-18.8	38.1	Verified	Verified	27.4	25.8	D.N.P.	Verified	27.4	Verified
			Base	DL, LL	290.4	-44.9	-20.1	-14.0	29.6	Verified	Verified	14.9	21.5	D.N.P.	Verified	21.5	Verified
			Head	DL, LL	272.0	29.1	14.9	-14.0	29.6	Verified	Verified	15.0	15.5	D.N.P.	Verified	15.5	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	342.9	76.3	30.9	-23.7	59.7	Verified	Verified	34.6	33.4	D.N.P.	Verified	34.6	Verified
			Head	DL, E	212.7	64.4	25.3	-19.4	50.4	Verified	Verified	41.8	26.7	D.N.P.	Verified	41.8	Verified
			Base	DL, LL	507.5	-45.5	-16.0	-13.1	37.0	Verified	Verified	16.3	24.6	D.N.P.	Verified	24.6	Verified
			Head	DL, LL	489.1	46.9	16.6	-13.1	37.0	Verified	Verified	16.4	24.6	D.N.P.	Verified	24.6	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	441.9	81.1	31.0	-24.0	63.9	Verified	Verified	25.7	36.7	D.N.P.	Verified	36.7	Verified
			Head	DL, E	271.9	73.2	8.7	-6.6	57.8	Verified	Verified	44.5	26.1	D.N.P.	Verified	44.5	Verified
			Base	DL, LL	734.5	-39.3	-12.4	-10.5	32.2	Verified	Verified	13.0	28.8	D.N.P.	Verified	28.8	Verified
			Head	DL, LL, W	561.9	44.7	10.8	-8.1	34.9	Verified	Verified	14.6	25.0	D.N.P.	Verified	25.0	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1037.7	32.1	17.1	12.5	-24.3	Verified	Verified	8.5	38.3	D.N.P.	Verified	38.3	Verified
			Head	DL, E	281.7	71.1	22.5	-18.1	57.5	Verified	Verified	42.3	28.8	D.N.P.	Verified	42.3	Verified
			Base	DL, LL	974.7	-32.9	-6.9	-6.3	26.8	Verified	Verified	9.9	35.6	D.N.P.	Verified	35.6	Verified
			Head	DL, LL, W	723.1	41.9	7.0	-4.9	33.3	Verified	Verified	13.0	28.6	D.N.P.	Verified	28.6	Verified
Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1326.6	38.6	18.5	11.4	-24.1	Verified	Verified	7.7	49.0	D.N.P.	Verified	49.0	Verified
			Head	DL, E	326.8	49.0	11.8	-12.3	40.7	Verified	Verified	16.8	21.3	D.N.P.	Verified	21.3	Verified
			Base	DL, LL	1236.2	-12.0	-1.5	-2.0	14.0	Verified	Verified	4.7	45.2	D.N.P.	Verified	45.2	Verified
			Head	DL, LL, W	899.7	29.7	2.7	-1.9	21.7	Verified	Verified	8.0	32.9	D.N.P.	Verified	32.9	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1326.6	38.6	18.5	11.4	-24.1	D.N.P.	D.N.P.	D.N.P.	49.0	D.N.P.	Verified	49.0	Verified
			Base	DL, LL	1236.2	-12.0	-1.5	-2.0	14.0	D.N.P.	D.N.P.	D.N.P.	45.2	D.N.P.	Verified	45.2	Verified



2.21.- C21

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	30x30	Base	DL, LL, E	277.2	-7.1	-7.6	-4.2	1.5	Verified	Verified	4.2	32.1	D.N.P.	Verified	32.1	Verified
			Head	DL, E	197.2	5.0	5.0	-4.1	0.9	Verified	Verified	4.3	22.4	D.N.P.	Verified	22.4	Verified
			Base	DL	313.9	-8.1	-8.1	-0.2	1.8	Verified	Verified	1.9	36.0	D.N.P.	Verified	36.0	Verified
			Head	DL, LL	287.3	7.4	7.4	-0.2	2.2	Verified	Verified	2.4	32.9	D.N.P.	Verified	32.9	Verified
Floor 4	9.00/12.00	30x30	Base	DL, LL, E	434.6	-11.6	-14.5	-10.5	2.0	Verified	Verified	9.0	52.9	D.N.P.	Verified	52.9	Verified
			Head	DL, E	293.0	7.6	14.0	-10.4	1.1	Verified	Verified	9.8	39.8	D.N.P.	Verified	39.8	Verified
			Base	DL, LL	516.4	-14.1	-14.1	-0.4	3.3	Verified	Verified	3.0	60.4	D.N.P.	Verified	60.4	Verified
			Head	DL, LL, W	426.6	11.4	11.4	-0.1	3.4	Verified	Verified	3.3	49.5	D.N.P.	Verified	49.5	Verified
Floor 3	6.00/9.00	30x30	Base	DL, LL, E	606.6	17.0	17.0	0.2	-2.3	Verified	Verified	1.8	71.7	D.N.P.	Verified	71.7	Verified
			Head	DL, E	396.4	10.5	16.1	-11.7	0.8	Verified	Verified	10.1	51.1	D.N.P.	Verified	51.1	Verified
			Base	DL, LL	751.8	-22.0	-22.0	-0.2	2.7	Verified	Verified	2.2	90.3	D.N.P.	Verified	90.3	Verified
			Head	DL, LL, W	594.2	16.6	-16.6	0.1	3.3	Verified	Verified	2.8	70.1	D.N.P.	Verified	70.1	Verified
Floor 2	3.00/6.00	30x30	Base	DL, LL, E	789.2	23.3	23.3	0.4	-3.1	Verified	Verified	1.9	76.2	D.N.P.	Verified	76.2	Verified
			Head	DL, E	505.9	13.8	-16.0	11.3	1.6	Verified	Verified	7.8	48.8	D.N.P.	Verified	48.8	Verified
			Base	DL, LL	1004.3	-31.7	-31.7	-0.1	2.2	Verified	Verified	1.3	99.2	D.N.P.	Verified	99.2	Verified
			Head	DL, LL, W	775.4	22.8	-22.8	0.3	3.0	Verified	Verified	2.0	74.8	D.N.P.	Verified	74.8	Verified
Floor 1	0.00/3.00	30x30	Base	DL, LL, E	989.2	31.1	31.1	0.4	-2.9	Verified	Verified	1.7	70.0	D.N.P.	Verified	70.0	Verified
			Head	DL, E	629.2	17.8	-17.8	6.7	0.9	Verified	Verified	4.7	42.6	D.N.P.	Verified	42.6	Verified
			Base	DL, LL	1280.7	-44.2	44.2	0.0	1.1	Verified	Verified	0.6	94.4	D.N.P.	Verified	94.4	Verified
			Head	DL, W	628.9	17.8	17.8	-0.3	1.7	Verified	Verified	1.3	42.6	D.N.P.	Verified	42.6	Verified
Foundations	-0.16/0.00	30x30	Base	DL, LL, E	989.2	31.1	31.1	0.4	-2.9	D.N.P.	D.N.P.	D.N.P.	70.0	D.N.P.	Verified	70.0	Verified
			Base	DL, LL	1280.7	-44.2	44.2	0.0	1.1	D.N.P.	D.N.P.	D.N.P.	94.4	D.N.P.	Verified	94.4	Verified

2.22.- C22

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	284.3	-37.9	33.7	23.4	26.7	Verified	Verified	14.2	22.9	D.N.P.	Verified	22.9	Verified
			Head	DL, LL, E	265.9	28.8	-24.8	23.4	26.7	Verified	Verified	14.4	17.6	D.N.P.	Verified	17.6	Verified
			Base	DL, LL	329.3	-29.2	20.8	14.4	20.5	Verified	Verified	11.2	17.8	D.N.P.	Verified	17.8	Verified
			Head	DL, LL	310.9	22.2	-15.2	14.4	20.5	Verified	Verified	11.3	14.7	D.N.P.	Verified	14.7	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	476.4	43.4	-43.0	32.8	34.0	Verified	Verified	17.5	29.1	D.N.P.	Verified	29.1	Verified
			Base	DL, LL	625.9	-25.3	16.9	13.8	20.1	Verified	Verified	9.7	23.7	D.N.P.	Verified	23.7	Verified
			Head	DL, LL	607.5	25.0	-17.6	13.8	20.1	Verified	Verified	9.8	23.2	D.N.P.	Verified	23.2	Verified
			Head	DL, LL, E	684.8	46.0	-45.0	35.1	36.2	Verified	Verified	17.4	34.0	D.N.P.	Verified	34.0	Verified
Floor 3	6.00/9.00	50x50	Base	DL, LL	923.6	-23.0	13.7	11.5	18.8	Verified	Verified	8.0	33.7	D.N.P.	Verified	33.7	Verified
			Head	DL, LL, W	739.5	28.4	-12.0	9.1	22.0	Verified	Verified	9.1	27.0	D.N.P.	Verified	27.0	Verified
			Base	DL, LL, E	1082.8	5.7	-34.3	-25.4	-4.0	Verified	Verified	7.9	40.0	D.N.P.	Verified	40.0	Verified
			Head	DL, LL, E	891.5	41.8	-39.9	32.7	34.3	Verified	Verified	15.3	37.1	D.N.P.	Verified	37.1	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL	1220.5	-20.6	8.6	7.6	16.4	Verified	Verified	6.1	44.6	D.N.P.	Verified	44.6	Verified
			Head	DL, LL, W	968.7	26.4	-8.2	6.0	21.4	Verified	Verified	8.0	35.4	D.N.P.	Verified	35.4	Verified
			Base	DL, LL, E	1336.5	9.0	-33.0	-20.1	-3.3	Verified	Verified	5.9	49.3	D.N.P.	Verified	49.3	Verified
			Head	DL, E	703.1	21.2	-18.8	20.7	19.1	Verified	Verified	9.7	25.9	D.N.P.	Verified	25.9	Verified
Floor 1	0.00/3.00	50x50	Base	DL, LL	1518.6	-7.8	3.0	2.9	9.2	Verified	Verified	3.0	55.5	D.N.P.	Verified	55.5	Verified
			Head	DL, LL, W	1200.0	18.3	-2.8	2.3	14.5	Verified	Verified	5.0	43.8	D.N.P.	Verified	43.8	Verified
			Base	DL, LL, E	1336.5	9.0	-33.0	-20.1	-3.3	D.N.P.	D.N.P.	D.N.P.	49.3	D.N.P.	Verified	49.3	Verified
			Base	DL, LL	1518.6	-7.8	3.0	2.9	9.2	D.N.P.	D.N.P.	D.N.P.	55.5	D.N.P.	Verified	55.5	Verified



U.L.S. Checks

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Date: 11/20/20

2.23.- C23

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	334.2	42.0	-27.7	-18.9	-29.9	Verified	Verified	13.9	23.0	D.N.P.	Verified	23.0	Verified
			Head	DL, LL, E	316.5	-29.7	17.5	-18.8	-29.9	Verified	Verified	14.0	17.0	D.N.P.	Verified	17.0	Verified
			Base	DL, LL	360.6	24.9	-3.5	-2.6	-16.9	Verified	Verified	7.5	15.0	D.N.P.	Verified	15.0	Verified
			Head	DL, LL, W	318.3	-18.7	3.0	-2.7	-18.8	Verified	Verified	8.5	12.6	D.N.P.	Verified	12.6	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	516.6	-50.2	41.4	-32.2	-39.0	Verified	Verified	18.5	31.0	D.N.P.	Verified	31.0	Verified
			Base	DL, LL	648.5	23.3	-2.4	-1.8	-18.5	Verified	Verified	7.4	23.7	D.N.P.	Verified	23.7	Verified
			Head	DL, LL, W	531.2	-26.0	2.7	-2.3	-20.5	Verified	Verified	8.5	19.9	D.N.P.	Verified	19.9	Verified
			Head	DL, LL, E	716.8	-57.5	47.3	-37.5	-45.3	Verified	Verified	20.1	37.7	D.N.P.	Verified	37.7	Verified
Floor 3	6.00/9.00	50x50	Head	DL, E	469.8	-50.8	46.7	-37.0	-40.0	Verified	Verified	20.2	31.9	D.N.P.	Verified	31.9	Verified
			Base	DL, LL	942.4	24.2	-2.4	-1.9	-19.6	Verified	Verified	7.1	34.4	D.N.P.	Verified	34.4	Verified
			Head	DL, LL, W	749.6	-30.7	3.6	-2.8	-24.0	Verified	Verified	9.3	27.4	D.N.P.	Verified	27.4	Verified
			Base	DL, LL, E	952.4	62.8	-33.6	-26.0	-48.1	Verified	Verified	17.4	41.6	D.N.P.	Verified	41.6	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL, E	934.1	-57.4	31.5	-26.1	-48.1	Verified	Verified	17.5	39.7	D.N.P.	Verified	39.7	Verified
			Base	DL, LL	1241.4	28.6	-2.4	-1.9	-22.2	Verified	Verified	7.4	45.4	D.N.P.	Verified	45.4	Verified
			Head	DL, LL, W	970.7	-33.0	3.6	-3.0	-27.3	Verified	Verified	9.8	35.5	D.N.P.	Verified	35.5	Verified
			Base	DL, LL, E	1307.5	-16.3	39.1	26.2	5.5	Verified	Verified	7.8	48.2	D.N.P.	Verified	48.2	Verified
Floor 1	0.00/3.00	50x50	Head	DL, E	707.6	-25.1	29.0	-27.6	-23.3	Verified	Verified	12.3	27.7	D.N.P.	Verified	27.7	Verified
			Base	DL, LL	1549.8	14.2	-0.7	-1.2	-15.1	Verified	Verified	4.7	56.6	D.N.P.	Verified	56.6	Verified
			Head	DL, LL, W	1198.6	-25.3	2.8	-1.9	-20.0	Verified	Verified	6.8	43.8	D.N.P.	Verified	43.8	Verified
			Base	DL, LL, E	1307.5	-16.3	39.1	26.2	5.5	D.N.P.	D.N.P.	D.N.P.	48.2	D.N.P.	Verified	48.2	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL	1549.8	14.2	-0.7	-1.2	-15.1	D.N.P.	D.N.P.	D.N.P.	56.6	D.N.P.	Verified	56.6	Verified

2.24.- C24

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	81.6	-18.7	8.1	5.5	15.4	Verified	Verified	9.6	8.3	D.N.P.	Verified	9.6	Verified
			Head	DL, LL, E	63.2	19.9	-5.7	5.5	15.4	Verified	Verified	12.9	7.6	D.N.P.	Verified	12.9	Verified
			Head	DL, LL, W	58.1	9.3	-3.9	3.8	6.0	Verified	Verified	3.6	4.4	D.N.P.	Verified	4.4	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	202.7	30.0	-16.5	12.8	22.1	Verified	Verified	10.6	15.2	D.N.P.	Verified	15.2	Verified
			Head	DL, E	78.9	-40.5	7.7	-5.9	-29.4	Verified	Verified	26.2	14.2	D.N.P.	Verified	26.2	Verified
			Head	DL, LL, W	164.1	-15.7	-5.5	4.3	-11.1	Verified	Verified	5.7	8.2	D.N.P.	Verified	8.2	Verified
			Head	DL, W	151.7	-16.1	-4.4	3.5	-11.4	Verified	Verified	5.8	7.9	D.N.P.	Verified	7.9	Verified
Floor 3	6.00/9.00	50x50	Base	DL, LL, E	450.7	-1.0	41.3	32.8	0.8	Verified	Verified	12.3	21.1	D.N.P.	Verified	21.1	Verified
			Head	DL, E	95.4	-42.8	13.9	-11.4	-33.4	Verified	Verified	29.6	16.2	D.N.P.	Verified	29.6	Verified
			Base	DL, LL	335.6	2.6	6.5	5.3	-2.0	Verified	Verified	2.5	12.3	D.N.P.	Verified	12.3	Verified
			Head	DL, W	242.6	-15.3	-3.3	2.5	-11.8	Verified	Verified	5.6	9.9	D.N.P.	Verified	9.9	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	671.1	-0.4	51.4	38.8	-0.4	Verified	Verified	13.4	28.9	D.N.P.	Verified	28.9	Verified
			Base	DL, E	94.6	45.6	-23.9	-17.6	-34.2	Verified	Verified	32.8	20.6	D.N.P.	Verified	32.8	Verified
			Base	DL, LL	455.4	4.0	5.5	4.5	-3.3	Verified	Verified	2.4	16.6	D.N.P.	Verified	16.6	Verified
			Head	DL, W	328.1	-17.1	-2.1	1.5	-14.2	Verified	Verified	6.4	12.5	D.N.P.	Verified	12.5	Verified
Floor 1	0.00/3.00	50x50	Base	DL, LL, E	885.2	-5.4	42.3	28.7	1.0	Verified	Verified	9.3	33.1	D.N.P.	Verified	33.1	Verified
			Base	DL, E	92.5	48.8	-21.0	-13.6	-28.3	Verified	Verified	27.1	21.0	D.N.P.	Verified	27.1	Verified
			Base	DL, LL	569.1	2.3	2.5	2.4	-2.4	Verified	Verified	1.4	20.8	D.N.P.	Verified	20.8	Verified
			Head	DL, W	410.0	-10.6	-1.1	0.5	-11.3	Verified	Verified	4.9	15.0	D.N.P.	Verified	15.0	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL, E	885.2	-5.4	42.3	28.7	1.0	D.N.P.	D.N.P.	D.N.P.	33.1	D.N.P.	Verified	33.1	Verified
			Base	DL, LL	569.1	2.3	2.5	2.4	-2.4	D.N.P.	D.N.P.	D.N.P.	20.8	D.N.P.	Verified	20.8	Verified



U.L.S. Checks

edificio 2.0

Date: 11/20/20

2.25.- C25

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	138.7	35.7	-78.1	-60.4	-25.9	Verified	Verified	57.0	34.6	D.N.P.	Verified	57.0	Verified
			Base	DL, LL, E	130.5	10.3	-83.9	-66.5	-7.0	Verified	Verified	59.3	30.7	D.N.P.	Verified	59.3	Verified
			Base	DL, LL	144.0	25.3	-92.4	-69.8	-17.4	Verified	Verified	71.2	36.7	D.N.P.	Verified	71.2	Verified
Floor 4	9.00/12.00	50x50	12.00 m	DL, LL, E	138.7	35.7	-78.1	-60.4	-25.9	D.N.P.	D.N.P.	D.N.P.	34.6	D.N.P.	Verified	34.6	Verified
			Head	DL, LL, E	247.6	2.8	56.4	-47.6	0.9	Verified	Verified	28.1	20.8	D.N.P.	Verified	28.1	Verified
			12.00 m	DL, LL	144.0	25.3	-92.4	-69.8	-17.4	D.N.P.	D.N.P.	D.N.P.	36.7	D.N.P.	Verified	36.7	Verified
			Head	DL, LL	302.1	-22.9	60.1	-52.8	-19.2	Verified	Verified	25.4	26.7	D.N.P.	Verified	26.7	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	467.9	-63.3	50.5	-41.5	-50.7	Verified	Verified	24.4	36.6	D.N.P.	Verified	36.6	Verified
			Head	DL, LL	475.5	-23.0	73.4	-59.6	-18.8	Verified	Verified	26.3	32.8	D.N.P.	Verified	32.8	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	666.9	68.8	-50.7	-41.0	-55.6	Verified	Verified	23.9	40.5	D.N.P.	Verified	40.5	Verified
			Head	DL, LL, E	649.2	-64.7	47.6	-41.0	-55.6	Verified	Verified	24.1	38.4	D.N.P.	Verified	38.4	Verified
			Base	DL, LL	666.1	24.2	-75.7	-60.5	-19.7	Verified	Verified	25.0	36.8	D.N.P.	Verified	36.8	Verified
			Head	DL, LL	648.5	-23.1	69.4	-60.5	-19.7	Verified	Verified	25.1	34.6	D.N.P.	Verified	34.6	Verified
Floor 1	0.00/3.00	50x50	3.00 m	DL, LL, E	666.9	68.8	-50.7	-41.0	-55.6	D.N.P.	D.N.P.	D.N.P.	40.5	D.N.P.	Verified	40.5	Verified
			Head	DL, LL, E	823.4	-44.0	49.2	-25.5	-48.0	Verified	Verified	17.9	37.6	D.N.P.	Verified	37.6	Verified
			3.00 m	DL, LL	666.1	24.2	-75.7	-60.5	-19.7	D.N.P.	D.N.P.	D.N.P.	36.8	D.N.P.	Verified	36.8	Verified
			Head	DL, LL	817.7	-18.8	64.5	-42.7	-13.4	Verified	Verified	16.7	36.7	D.N.P.	Verified	36.7	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL, E	841.0	71.2	-11.9	-25.5	-48.0	D.N.P.	D.N.P.	D.N.P.	38.1	D.N.P.	Verified	38.1	Verified
			Base	DL, LL	835.3	13.4	-37.9	-42.7	-13.4	D.N.P.	D.N.P.	D.N.P.	31.3	D.N.P.	Verified	31.3	Verified

2.26.- C26

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	265.3	47.8	10.7	8.3	-35.0	Verified	Verified	14.6	20.0	D.N.P.	Verified	20.0	Verified
			Head	DL, LL, E	246.9	-39.7	-10.1	8.3	-35.0	Verified	Verified	14.7	17.2	D.N.P.	Verified	17.2	Verified
			Base	DL, LL	283.6	44.2	6.7	5.3	-31.1	Verified	Verified	14.4	18.5	D.N.P.	Verified	18.5	Verified
			Head	DL, LL	265.2	-33.6	-6.4	5.3	-31.1	Verified	Verified	14.5	15.1	D.N.P.	Verified	15.1	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	501.1	-51.0	-14.3	10.6	-39.3	Verified	Verified	14.9	25.5	D.N.P.	Verified	25.5	Verified
			Base	DL, LL	579.8	37.0	3.8	2.8	-29.1	Verified	Verified	11.8	23.4	D.N.P.	Verified	23.4	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL	561.4	-35.8	-3.2	2.8	-29.1	Verified	Verified	11.9	22.7	D.N.P.	Verified	22.7	Verified
			Head	DL, LL, E	761.2	-59.9	-17.9	13.5	-46.2	Verified	Verified	16.2	34.2	D.N.P.	Verified	34.2	Verified
			Base	DL, LL	874.4	36.9	3.7	3.2	-30.0	Verified	Verified	11.1	32.0	D.N.P.	Verified	32.0	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL	856.0	-38.2	-4.2	3.2	-30.0	Verified	Verified	11.2	31.5	D.N.P.	Verified	31.5	Verified
			Base	DL, LL, E	1041.9	64.5	19.0	14.3	-50.0	Verified	Verified	16.1	42.6	D.N.P.	Verified	42.6	Verified
			Head	DL, LL, E	1023.5	-60.5	-16.8	14.3	-50.0	Verified	Verified	16.2	41.1	D.N.P.	Verified	41.1	Verified
			Base	DL, LL	1168.7	41.0	3.2	2.5	-31.8	Verified	Verified	10.8	42.7	D.N.P.	Verified	42.7	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL, W	960.8	-37.0	-3.7	3.0	-30.2	Verified	Verified	10.9	35.1	D.N.P.	Verified	35.1	Verified
			Base	DL, LL, E	1299.4	60.3	22.9	13.2	-41.7	Verified	Verified	12.7	49.2	D.N.P.	Verified	49.2	Verified
			Head	DL, LL, E	1281.0	-43.9	-10.0	13.2	-41.7	Verified	Verified	12.8	47.3	D.N.P.	Verified	47.3	Verified
			Base	DL, LL	1460.7	20.6	2.0	1.6	-21.2	Verified	Verified	6.8	53.4	D.N.P.	Verified	53.4	Verified
Foundations	-0.17/0.00	50x50	Head	DL, LL, W	1199.7	-30.3	-3.0	2.9	-23.6	Verified	Verified	8.0	43.8	D.N.P.	Verified	43.8	Verified
			Base	DL, LL, E	1299.4	60.3	22.9	13.2	-41.7	D.N.P.	D.N.P.	D.N.P.	49.2	D.N.P.	Verified	49.2	Verified
			Base	DL, LL	1460.7	20.6	2.0	1.6	-21.2	D.N.P.	D.N.P.	D.N.P.	53.4	D.N.P.	Verified	53.4	Verified



2.27.- C27

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks						Status	
				Nature	N (kN)	Mxx (kN·m)	Myy (kN·m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.		Use (%)
techo	12.00/15.00	50x50	Base	DL, LL, E	273.3	50.4	4.8	3.7	-38.0	Verified	Verified	15.4	19.9	D.N.P.	Verified	19.9	Verified
			Head	DL, LL, E	254.8	-44.8	0.9	-0.8	-38.1	Verified	Verified	15.5	17.5	D.N.P.	Verified	17.5	Verified
			Base	DL, LL	291.9	48.0	-3.7	-2.8	-34.8	Verified	Verified	15.8	19.3	D.N.P.	Verified	19.3	Verified
			Head	DL, LL	273.5	-38.9	3.4	-2.8	-34.8	Verified	Verified	15.9	16.4	D.N.P.	Verified	16.4	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	508.2	-43.7	-11.8	8.2	-34.3	Verified	Verified	12.9	23.6	D.N.P.	Verified	23.6	Verified
			Base	DL, LL	592.3	37.1	-1.9	-1.5	-28.8	Verified	Verified	11.6	23.7	D.N.P.	Verified	23.7	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL	573.9	-34.9	1.9	-1.5	-28.8	Verified	Verified	11.7	22.8	D.N.P.	Verified	22.8	Verified
			Head	DL, LL, E	762.3	-52.2	-13.9	10.5	-40.2	Verified	Verified	14.0	32.1	D.N.P.	Verified	32.1	Verified
			Base	DL, LL	890.3	37.9	-1.2	-1.1	-31.0	Verified	Verified	11.4	32.5	D.N.P.	Verified	32.5	Verified
Floor 2	3.00/6.00	50x50	Head	DL, LL	871.9	-39.6	1.6	-1.1	-31.0	Verified	Verified	11.4	32.1	D.N.P.	Verified	32.1	Verified
			Base	DL, LL, E	1035.4	54.5	15.9	11.8	-42.2	Verified	Verified	13.6	40.2	D.N.P.	Verified	40.2	Verified
			Head	DL, LL, E	1016.6	-50.9	-13.9	12.0	-42.1	Verified	Verified	13.7	38.9	D.N.P.	Verified	38.9	Verified
			Base	DL, LL	1187.7	42.5	0.5	0.1	-32.9	Verified	Verified	11.1	43.4	D.N.P.	Verified	43.4	Verified
Floor 1	0.00/3.00	50x50	Head	DL, LL	1169.3	-39.6	0.2	0.1	-32.9	Verified	Verified	11.2	42.7	D.N.P.	Verified	42.7	Verified
			Base	DL, LL, E	1286.4	49.1	5.7	3.3	-34.7	Verified	Verified	10.2	47.5	D.N.P.	Verified	47.5	Verified
			Head	DL, LL, E	1265.8	-37.6	-7.7	11.8	-34.1	Verified	Verified	10.6	46.7	D.N.P.	Verified	46.7	Verified
			Base	DL, LL	1482.1	21.3	1.1	0.7	-22.3	Verified	Verified	7.0	54.2	D.N.P.	Verified	54.2	Verified
Foundations	-0.17/0.00	50x50	Head	DL, LL, W	1208.2	-29.3	-1.4	1.9	-22.2	Verified	Verified	7.5	44.1	D.N.P.	Verified	44.1	Verified
			Base	DL, LL, E	1286.4	49.1	5.7	3.3	-34.7	D.N.P.	D.N.P.	D.N.P.	47.5	D.N.P.	Verified	47.5	Verified
			Base	DL, LL	1482.1	21.3	1.1	0.7	-22.3	D.N.P.	D.N.P.	D.N.P.	54.2	D.N.P.	Verified	54.2	Verified

2.28.- C28

Concrete sections																	
Floor	Span (m)	Dimension	Position	Worst case forces						Checks							Status
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)	
techo	12.00/15.00	50x50	Base	DL, LL, E	269.0	47.3	-8.5	-6.6	-35.6	Verified	Verified	14.6	19.5	D.N.P.	Verified	19.5	Verified
			Head	DL, LL, E	250.8	-43.4	-3.5	2.9	-36.8	Verified	Verified	15.0	17.3	D.N.P.	Verified	17.3	Verified
			Base	DL, LL	291.2	48.6	5.1	3.9	-35.3	Verified	Verified	16.1	19.7	D.N.P.	Verified	19.7	Verified
			Head	DL, LL	272.8	-39.6	-4.6	3.9	-35.3	Verified	Verified	16.2	16.7	D.N.P.	Verified	16.7	Verified
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	498.2	-38.0	20.8	-14.7	-30.4	Verified	Verified	12.4	23.4	D.N.P.	Verified	23.4	Verified
			Base	DL, LL	590.5	37.4	3.0	2.3	-29.0	Verified	Verified	11.7	23.8	D.N.P.	Verified	23.8	Verified
			Head	DL, LL	572.1	-35.1	-2.8	2.3	-29.0	Verified	Verified	11.8	22.8	D.N.P.	Verified	22.8	Verified
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	746.2	-45.6	23.3	-18.0	-35.4	Verified	Verified	13.4	31.5	D.N.P.	Verified	31.5	Verified
			Head	DL, LL, E	746.2	-45.6	23.2	-18.0	-35.4	Verified	Verified	13.4	31.4	D.N.P.	Verified	31.4	Verified
			Base	DL, LL	887.6	38.1	2.6	2.2	-31.2	Verified	Verified	11.5	32.4	D.N.P.	Verified	32.4	Verified
			Head	DL, LL	869.2	-40.0	-3.0	2.2	-31.2	Verified	Verified	11.5	32.1	D.N.P.	Verified	32.1	Verified
Floor 2	3.00/6.00	50x50	Base	DL, LL, E	1012.8	47.9	-27.3	-19.8	-36.5	Verified	Verified	13.0	39.6	D.N.P.	Verified	39.6	Verified
			Head	DL, LL, E	994.3	-43.2	22.2	-19.8	-36.4	Verified	Verified	13.0	37.6	D.N.P.	Verified	37.6	Verified
			Base	DL, LL	1183.7	42.1	1.2	1.1	-32.6	Verified	Verified	11.1	43.3	D.N.P.	Verified	43.3	Verified
			Head	DL, LL	1165.3	-39.5	-1.6	1.1	-32.6	Verified	Verified	11.1	42.6	D.N.P.	Verified	42.6	Verified
Floor 1	0.00/3.00	50x50	Base	DL, LL, E	1270.7	44.2	4.5	2.6	-31.8	Verified	Verified	9.3	46.9	D.N.P.	Verified	46.9	Verified
			Head	DL, LL, E	1251.3	-35.6	-2.2	2.7	-32.1	Verified	Verified	9.5	46.2	D.N.P.	Verified	46.2	Verified
			Base	DL, LL	1476.6	20.7	0.7	0.3	-21.9	Verified	Verified	6.9	54.0	D.N.P.	Verified	54.0	Verified
			Head	DL, LL, W	1204.6	-28.7	0.5	-0.8	-21.6	Verified	Verified	7.3	44.0	D.N.P.	Verified	44.0	Verified
Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1270.7	44.2	4.5	2.6	-31.8	D.N.P.	D.N.P.	D.N.P.	46.9	D.N.P.	Verified	46.9	Verified
			Base	DL, LL	1476.6	20.7	0.7	0.3	-21.9	D.N.P.	D.N.P.	D.N.P.	54.0	D.N.P.	Verified	54.0	Verified



2.29.- C29

Concrete sections																
Floor	Span (m)	Dimension	Position	Worst case forces					Checks							
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)
techo	12.00/15.00	50x50	Base	DL, LL, E	262.4	41.0	-16.0	-13.2	-30.4	Verified	Verified	13.4	19.1	D.N.P.	Verified	19.1
			Head	DL, LL, E	244.0	-34.9	16.9	-13.1	-30.3	Verified	Verified	13.5	17.2	D.N.P.	Verified	17.2
			Base	DL, LL	279.6	36.6	-5.5	-5.2	-26.0	Verified	Verified	12.1	16.1	D.N.P.	Verified	16.1
			Head	DL, LL	261.2	-28.3	7.6	-5.2	-26.0	Verified	Verified	12.2	13.7	D.N.P.	Verified	13.7
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	489.2	-42.9	17.3	-13.2	-33.1	Verified	Verified	13.2	23.8	D.N.P.	Verified	23.8
			Base	DL, LL	565.7	30.2	-0.7	0.1	-23.7	Verified	Verified	9.6	21.7	D.N.P.	Verified	21.7
			Head	DL, LL	547.3	-29.1	-1.0	0.1	-23.7	Verified	Verified	9.7	20.9	D.N.P.	Verified	20.9
			Head	DL, LL, E	738.7	-49.2	23.1	-17.7	-38.3	Verified	Verified	14.3	31.9	D.N.P.	Verified	31.9
Floor 3	6.00/9.00	50x50	Base	DL, LL	851.5	30.7	-2.0	-1.8	-25.0	Verified	Verified	9.3	31.1	D.N.P.	Verified	31.1
			Head	DL, LL, W	704.9	-32.0	4.4	-3.3	-24.7	Verified	Verified	9.7	26.0	D.N.P.	Verified	26.0
			Base	DL, LL, E	1009.1	53.8	-25.2	-18.5	-40.6	Verified	Verified	14.0	40.3	D.N.P.	Verified	40.3
			Head	DL, LL, E	990.6	-47.7	21.1	-18.5	-40.6	Verified	Verified	14.0	38.2	D.N.P.	Verified	38.2
Floor 2	3.00/6.00	50x50	Base	DL, LL	1137.5	34.2	-2.6	-1.8	-26.6	Verified	Verified	9.1	41.6	D.N.P.	Verified	41.6
			Head	DL, LL, W	940.0	-32.4	3.7	-3.4	-26.8	Verified	Verified	9.8	34.3	D.N.P.	Verified	34.3
			Base	DL, LL, E	1256.2	43.9	-26.4	-15.5	-30.1	Verified	Verified	9.9	46.4	D.N.P.	Verified	46.4
			Head	DL, LL, E	1237.5	-31.4	12.2	-15.4	-30.1	Verified	Verified	10.0	45.7	D.N.P.	Verified	45.7
Floor 1	0.00/3.00	50x50	Base	DL, LL	1422.2	16.7	-1.1	-1.7	-17.8	Verified	Verified	5.7	52.0	D.N.P.	Verified	52.0
			Head	DL, LL, W	1173.3	-25.1	3.7	-2.8	-19.9	Verified	Verified	6.8	42.9	D.N.P.	Verified	42.9
			Base	DL, LL, E	1256.2	43.9	-26.4	-15.5	-30.1	D.N.P.	D.N.P.	D.N.P.	46.4	D.N.P.	Verified	46.4
			Head	DL, LL	1422.2	16.7	-1.1	-1.7	-17.8	D.N.P.	D.N.P.	D.N.P.	52.0	D.N.P.	Verified	52.0
Foundations	-0.17/0.00	50x50	Base	DL, LL, E	1256.2	43.9	-26.4	-15.5	-30.1	D.N.P.	D.N.P.	D.N.P.	46.4	D.N.P.	Verified	46.4
			Head	DL, LL	1422.2	16.7	-1.1	-1.7	-17.8	D.N.P.	D.N.P.	D.N.P.	52.0	D.N.P.	Verified	52.0

2.30.- C30

Concrete sections																
Floor	Span (m)	Dimension	Position	Worst case forces					Checks							
				Nature	N (kN)	Mxx (kN-m)	Myy (kN-m)	Qx (kN)	Qy (kN)	Arrgmt.	Reinf.	Q (%)	N,M (%)	Arrgmt. S.	Cap.	Use (%)
techo	12.00/15.00	50x50	Base	DL, LL, E	139.4	28.5	75.5	57.4	-21.9	Verified	Verified	51.7	31.3	D.N.P.	Verified	51.7
			Base	DL, LL, E	133.4	13.6	81.2	63.7	-10.0	Verified	Verified	56.7	29.8	D.N.P.	Verified	56.7
			Base	DL, LL	143.7	18.1	91.1	67.9	-13.1	Verified	Verified	69.1	34.3	D.N.P.	Verified	69.1
			12.00 m	DL, LL, E	139.4	28.5	75.5	57.4	-21.9	D.N.P.	D.N.P.	D.N.P.	31.3	D.N.P.	Verified	31.3
Floor 4	9.00/12.00	50x50	Head	DL, LL, E	235.3	11.4	-54.9	44.7	6.3	Verified	Verified	28.7	21.4	D.N.P.	Verified	28.7
			12.00 m	DL, LL	143.7	18.1	91.1	67.9	-13.1	D.N.P.	D.N.P.	D.N.P.	34.3	D.N.P.	Verified	34.3
			Base	DL, LL	308.7	14.5	67.9	51.4	-11.1	Verified	Verified	31.5	27.1	D.N.P.	Verified	31.5
			Head	DL, LL, E	432.3	-44.5	-51.0	40.0	-34.2	Verified	Verified	19.9	31.0	D.N.P.	Verified	31.0
Floor 3	6.00/9.00	50x50	Head	DL, LL, E	386.1	-7.6	-72.0	55.4	-5.8	Verified	Verified	21.4	28.4	D.N.P.	Verified	28.4
			Head	DL, LL	455.3	-16.7	-74.8	58.4	-12.9	Verified	Verified	25.3	31.8	D.N.P.	Verified	31.8
			Base	DL, LL, E	612.2	50.4	52.0	40.6	-37.1	Verified	Verified	19.4	35.3	D.N.P.	Verified	35.3
			Head	DL, LL, E	522.3	-7.6	-66.7	57.6	-5.9	Verified	Verified	21.1	29.3	D.N.P.	Verified	29.3
Floor 2	3.00/6.00	50x50	Base	DL, LL	640.0	18.8	80.1	61.0	-14.5	Verified	Verified	24.8	36.6	D.N.P.	Verified	36.6
			Head	DL, LL	621.6	-17.4	-72.4	61.0	-14.5	Verified	Verified	25.0	34.0	D.N.P.	Verified	34.0
			3.00 m	DL, LL, E	612.2	50.4	52.0	40.6	-37.1	D.N.P.	D.N.P.	D.N.P.	35.3	D.N.P.	Verified	35.3
			Head	DL, LL, E	596.0	-3.0	-52.3	44.7	9.2	Verified	Verified	16.2	27.0	D.N.P.	Verified	27.0
Floor 1	0.00/3.00	50x50	3.00 m	DL, LL	640.0	18.8	80.1	61.0	-14.5	D.N.P.	D.N.P.	D.N.P.	36.6	D.N.P.	Verified	36.6
			Head	DL, LL	787.3	-16.4	-66.3	42.2	-10.5	Verified	Verified	16.4	36.1	D.N.P.	Verified	36.1
			Base	DL, LL, E	612.8	-26.6	59.4	44.6	9.5	D.N.P.	D.N.P.	D.N.P.	31.8	D.N.P.	Verified	31.8
			Base	DL, LL	805.7	9.7	39.3	42.2	-10.5	D.N.P.	D.N.P.	D.N.P.	30.5	D.N.P.	Verified	30.5

3.- BEAMS

3.1.- Floors 1 to 4

RESISTANCE CHECKS (CIRSOC 201-2005)																
Beams	Arrgmt.	Reinf.	Q	Q.S.	N,M	N,M S.	T ₁	T ₂	T ₃	T ₄	T ₅	T ₆	T ₇	T ₈	T ₉	Status
V-101: C25 - C26	Verified	Verified	0.000 m ³ η = 53.1	0.000 m ³ η = 43.0	4.142 m ³ η = 70.7	4.142 m ³ η = 63.6	0.058 m ³ η = 13.9	0.000 m ³ η = 38.9	D.N.P. ⁽¹⁾	0.000 m ³ η = 88.8	D.N.P. ⁽¹⁾	0.000 m ³ η = 26.1	D.N.P. ⁽¹⁾	0.000 m ³ η = 26.1	0.000 m ³ η = 26.1	0.000 m ³ η = 26.1
V-102: C26 - C27	Verified	Verified	9.032 m ³ η = 51.3	9.032 m ³ η = 41.3	4.308 m ³ η = 65.4	9.092 m ³ η = 60.0	9.442 m ³ η = 50.8	0.108 m ³ η = 35.7	D.N.P. ⁽¹⁾	9.442 m ³ η = 74.8	D.N.P. ⁽¹⁾	9.500 m ³ η = 20.9	D.N.P. ⁽¹⁾	9.442 m ³ η = 20.9	0.000 m ³ η = 20.9	0.000 m ³ η = 20.9
V-103: C27 - C28	Verified	Verified	0.408 m ³ η = 51.2	9.032 m ³ η = 42.3	4.258 m ³ η = 69.6	9.158 m ³ η = 61.7	0.058 m ³ η = 10.0	0.000 m ³ η = 35.8	D.N.P. ⁽¹⁾	9.392 m ³ η = 77.4	D.N.P. ⁽¹⁾	0.000 m ³ η = 21.4	D.N.P. ⁽¹⁾	0.000 m ³ η = 21.4	0.000 m ³ η = 21.4	0.000 m ³ η = 21.4
V-104: C28 - C29	Verified	Verified	9.032 m ³ η = 51.3	9.032 m ³ η = 44.1	4.192 m ³ η = 65.4	9.092 m ³ η = 60.5	0.108 m ³ η = 8.3	0.000 m ³ η = 36.3	D.N.P. ⁽¹⁾	9.392 m ³ η = 78.6	D.N.P. ⁽¹⁾	9.500 m ³ η = 20.7	D.N.P. ⁽¹⁾	9.442 m ³ η = 20.7	0.000 m ³ η = 20.7	0.000 m ³ η = 20.7
V-105: C29 - C30	Verified	Verified	9.032 m ³ η = 51.3	9.032 m ³ η = 47.1	4.492 m ³ η = 70.0	9.158 m ³ η = 62.2	0.058 m ³ η = 11.0	0.000 m ³ η = 39.5	D.N.P. ⁽¹⁾	9.392 m ³ η = 88.5	D.N.P. ⁽¹⁾	9.500 m ³ η = 20.7	D.N.P. ⁽¹⁾	9.442 m ³ η = 20.7	0.000 m ³ η = 20.7	0.000 m ³ η = 20.7
V-106: A102 - C24	Verified	Verified	0.000 m ³ η = 37.7	0.000 m ³ η = 46.7	A102 η = 7.6	A102 η = 6.6	1.216 m ³ η = 45.2	0.000 m ³ η = 32.1	D.N.P. ⁽¹⁾	0.209 m ³ η = 66.2	D.N.P. ⁽¹⁾	1.216 m ³ η = 21.9	D.N.P. ⁽¹⁾	0.000 m ³ η = 21.9	0.000 m ³ η = 21.9	0.000 m ³ η = 21.9
V-107: C17 - C18	4.167 m ³ Error ⁽¹⁾	Verified	0.000 m ³ η = 51.1	0.000 m ³ η = 42.2	C17 η = 50.5	C17 η = 52.9	4.258 m ³ η = 13.6	0.000 m ³ η = 53.4	D.N.P. ⁽¹⁾	2.158 m ³ η = 82.9	D.N.P. ⁽¹⁾	0.058 m ³ η = 25.3	D.N.P. ⁽¹⁾	0.058 m ³ η = 25.3	0.000 m ³ η = 25.3	0.000 m ³ η = 25.3
V-108: C18 - C19	Verified	Verified	4.082 m ³ η = 42.8	4.082 m ³ η = 37.0	4.082 m ³ η = 47.7	4.082 m ³ η = 52.8	0.000 m ³ η = 10.5	0.000 m ³ η = 68.8	D.N.P. ⁽¹⁾	1.408 m ³ η = 78.4	D.N.P. ⁽¹⁾	0.000 m ³ η = 22.3	D.N.P. ⁽¹⁾	0.000 m ³ η = 22.3	0.000 m ³ η = 22.3	0.000 m ³ η = 22.3
V-109: C19 - A44	Verified	Verified	3.250 m ³ η = 27.5	3.250 m ³ η = 40.4	3.250 m ³ η = 25.6	3.250 m ³ η = 54.9	0.000 m ³ η = 8.3	0.000 m ³ η = 43.0	D.N.P. ⁽¹⁾	3.604 m ³ η = 80.2	D.N.P. ⁽¹⁾	3.718 m ³ η = 19.4	D.N.P. ⁽¹⁾	3.604 m ³ η = 19.4	0.000 m ³ η = 19.4	0.000 m ³ η = 19.4
V-110: A82 - C23	Verified	Verified	0.000 m ³ η = 31.0	0.000 m ³ η = 25.0	3.502 m ³ η = 28.9	A82 η = 58.0	0.144 m ³ η = 9.1	0.000 m ³ η = 58.1	D.N.P. ⁽¹⁾	0.094 m ³ η = 82.6	D.N.P. ⁽¹⁾	0.094 m ³ η = 20.0	D.N.P. ⁽¹⁾	0.094 m ³ η = 20.0	0.000 m ³ η = 20.0	0.000 m ³ η = 20.0
V-111: C23 - A101	Verified	Verified	3.383 m ³ η = 25.0	3.383 m ³ η = 29.1	C23 η = 29.1	C23 η = 44.7	3.851 m ³ η = 8.9	0.732 m ³ η = 51.3	D.N.P. ⁽¹⁾	1.458 m ³ η = 66.8	D.N.P. ⁽¹⁾	3.851 m ³ η = 15.1	D.N.P. ⁽¹⁾	3.792 m ³ η = 15.1	0.732 m ³ η = 15.1	0.732 m ³ η = 15.1
V-112: A101 - A100	Verified	Verified	2.631 m ³ η = 31.0	2.631 m ³ η = 22.6	0.224 m ³ η = 16.3	2.674 m ³ η = 33.5	0.107 m ³ η = 17.8	0.000 m ³ η = 50.0	D.N.P. ⁽¹⁾	2.674 m ³ η = 59.2	D.N.P. ⁽¹⁾	0.107 m ³ η = 17.8	D.N.P. ⁽¹⁾	0.000 m ³ η = 17.8	0.000 m ³ η = 17.8	0.000 m ³ η =



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U.L.S. Checks

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Beams		Arrgmt.	Reinf.	Q	Q.S.	N.M	N.M.S	T _c	T _{st}	T _s	TNM _x	TNM _y	TV _x	TV _y	TV _s	TV _s	T.Arrgmt.	T.Arrgmt.	T.Ggeom.	T.Reinf.	Arrgmt. S.	Cap. C	Status
V-192: A94 - A93	Verified	Verified	Verified	0.468 m' η = 21.7	2.879 m' η = 42.4	0.468 m' η = 23.1	2.879 m' η = 60.4	0.000 m' η = 6.2	0.000 m' η = 32.1	0.000 m' η = 32.1	D.N.P. ⁽¹⁾	3.133 m' η = 77.9	D.N.P. ⁽²⁾	3.347 m' η = 16.6	D.N.P. ⁽³⁾	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	D.N.P. ⁽⁴⁾	Verified	VERIFIED η = 77.9
V-193: A108 - A107	Verified	Verified	Verified	0.000 m' η = 9.4	0.000 m' η = 15.6	A108' η = 19.7	A108' η = 39.1	4.594 m' η = 11.9	4.438 m' η = 61.0	4.204 m' η = 53.4	D.N.P. ⁽¹⁾	4.204 m' η = 77.3	D.N.P. ⁽²⁾	4.438 m' η = 11.9	D.N.P. ⁽³⁾	4.438 m' Verified	4.204 m' Verified	4.204 m' Verified	4.204 m' Verified	4.204 m' Verified	D.N.P. ⁽⁴⁾	Verified	VERIFIED η = 77.3
V-194: A107 - A106	Verified	Verified	Verified	3.435 m' η = 8.5	0.000 m' η = 14.6	3.435 m' η = 19.6	3.435 m' η = 37.8	0.000 m' η = 8.4	0.000 m' η = 43.1	0.203 m' η = 53.4	D.N.P. ⁽¹⁾	0.000 m' η = 77.2	D.N.P. ⁽²⁾	0.000 m' η = 9.0	D.N.P. ⁽³⁾	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	D.N.P. ⁽⁴⁾	Verified	VERIFIED η = 77.2
V-196: C14 - C24	Verified	Verified	Verified	0.000 m' η = 37.4	0.000 m' η = 43.7	0.203 m' η = 44.9	0.032 m' η = 42.8	0.102 m' η = 6.1	0.203 m' η = 34.1	0.203 m' η = 26.9	D.N.P. ⁽¹⁾	0.203 m' η = 38.5	D.N.P. ⁽²⁾	0.203 m' η = 5.4	D.N.P. ⁽³⁾	0.203 m' Verified	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	D.N.P. ⁽⁴⁾	Verified	VERIFIED η = 44.9
V-197: C24 - C30	Verified	Verified	Verified	0.468 m' η = 16.8	4.032 m' η = 26.0	0.468 m' η = 24.1	0.468 m' η = 46.8	4.500 m' η = 10.4	4.350 m' η = 53.6	0.150 m' η = 34.1	D.N.P. ⁽¹⁾	4.117 m' η = 63.7	D.N.P. ⁽²⁾	4.500 m' η = 12.1	D.N.P. ⁽³⁾	4.350 m' Verified	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	0.000 m' Verified	D.N.P. ⁽⁴⁾	Verified	VERIFIED η = 63.7

Beams	RESISTANCE CHECKS (CIRSOC 201-2005)																					Status	
	Arrgmt.	Reinf.	Q	Q.S.	N,M	N,M.S.	T _c	T _{st}	T _s	TNM _x	TNM _y	TV _x	TV _y	TV _s	TV _s	T _{Arrgmt.}	T _{Arrgmt.}	T _{Geom.}	T _{Reinf.}	Arrgmt. S.	Vib.		Cap. C
V-195: C6 - C14	'1.483 m'	Verified	'0.900 m'	'0.900 m'	'C6'	'C6'	'0.083 m'	'0.000 m'	'0.000 m'	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	'0.000 m'	D.N.P. ⁽²⁾	'0.000 m'	D.N.P. ⁽³⁾	'0.000 m'	'0.000 m'	'0.000 m'	'0.000 m'	D.N.P. ⁽⁴⁾	Error ⁽⁵⁾	Verified	ERROR

Notation:

Arrgmt.: Reinforcement arrangement
Reinf.: Minimum and maximum reinforcement
Q: Ultimate shear resistance (non-seismic combinations)
Q.S.: Ultimate limit state for shear (seismic combinations)
N,M: Limit state at failure under normal stresses (non-seismic combinations)
N,M.S.: Ultimate limit state for normal conditions (seismic combinations)
T_c: Torsion failure limit state. Oblique compression.
T_{st}: Torsion failure limit state. Tension in the web.
T_s: Torsion failure limit state. Tension in the longitudinal reinforcement.
TNM_x: Torsion failure limit state. Interaction between torsion and normal forces. Moment about the X-axis.
TNM_y: Torsion failure limit state. Interaction between torsion and normal forces. Moment about the Y-axis.
TV_x: Torsion failure limit state. Interaction between torsion and shear in the X-axis. Oblique compression
TV_y: Torsion failure limit state. Interaction between torsion and shear in the Y-axis. Oblique compression
TV_s: Torsion failure limit state. Interaction between torsion and shear in the X-axis. Tension in the web.
TV_s: Torsion failure limit state. Interaction between torsion and shear in the Y-axis. Tension in the web.
T_{Arrgmt.}: Torsion failure limit state. Spacing of longitudinal reinforcement bars.
T_{Arrgmt.}: Torsion failure limit state. Spacing of the transverse reinforcement bars.
T_{Geom.}: Torsion failure limit state. Minimum diameter of the longitudinal reinforcement.
T_{Reinf.}: Torsion failure limit state. Minimum closed stirrup steel area.
Arrgmt. S.: Seismic design criteria
Cap. C: Resistencia al corte, 2.2.8
x: Distance to the origin of the bar
η: Usage coefficient (%)
D.N.P.: Not applicable
Vib.: Separation required to introduce the vibrator

Checks that do not proceed (D.N.P.):

- ⁽¹⁾ The check does not proceed, as there is no interaction between torsional forces and normal forces.
⁽²⁾ There is no interaction between torsion and shear for any combination. Therefore, the check does not proceed.
⁽³⁾ Debido a la categoría de diseño sísmico de la estructura, no se realiza ninguna comprobación en cuanto a criterios de diseño por sismo.
⁽⁴⁾ The failure limit state check due to torsion does not proceed, because there is no torsional moment.

Errors:

- ⁽¹⁾ Not verified: 'Reinforcement arrangement' (Longitudinal reinforcement)
⁽²⁾ The maximum free separation available between the longitudinal bars (19.00 mm) is less than what is required to introduce the vibrator (20.00 mm).

Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	S _{F,top}	S _{F,Rgt.side}	S _{F,bot.}	S _{F,Lft.side}	
V-101: C25 - C26	x: 0 m Verified	x: 4.608 m Verified	x: 4.608 m Verified	x: 4.608 m Verified	VERIFIED
V-102: C26 - C27	x: 9.5 m Verified	x: 4.775 m Verified	x: 4.775 m Verified	x: 4.775 m Verified	VERIFIED
V-103: C27 - C28	x: 0 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	VERIFIED
V-104: C28 - C29	x: 9.5 m Verified	x: 4.658 m Verified	x: 4.658 m Verified	x: 4.658 m Verified	VERIFIED
V-105: C29 - C30	x: 0 m Verified	x: 4.958 m Verified	x: 4.958 m Verified	x: 4.958 m Verified	VERIFIED
V-106: A102 - C24	x: 1.251 m Verified	x: 1.251 m Verified	x: 0.283 m Verified	x: 1.251 m Verified	VERIFIED
V-107: C17 - C18	x: 0 m Verified	x: 0 m Verified	x: 2.625 m Verified	x: 0 m Verified	VERIFIED
V-108: C18 - C19	x: 0 m Verified	x: 4.55 m Verified	x: 1.875 m Verified	x: 4.55 m Verified	VERIFIED
V-109: C19 - A44	x: 3.718 m Verified	x: 3.718 m Verified	x: 1.97 m Verified	x: 3.718 m Verified	VERIFIED



Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	$S_{F,top}$	$S_{F,Rgt.side}$	$S_{F,bot.}$	$S_{F,Lft.side}$	
V-110: A82 - C23	x: 0 m Verified	x: 0 m Verified	x: 1.961 m Verified	x: 0 m Verified	VERIFIED
V-111: C23 - A101	x: 0 m Verified	x: 0 m Verified	x: 1.925 m Verified	x: 0 m Verified	VERIFIED
V-112: A101 - A100	x: 0 m Verified	x: 3.099 m Verified	x: 1.624 m Verified	x: 3.099 m Verified	VERIFIED
V-113: A43 - C20	x: 0 m Verified	x: 0 m Verified	x: 1.99 m Verified	x: 0 m Verified	VERIFIED
V-114: C20 - C21	x: 4.6 m Verified	x: 0 m Verified	x: 2.858 m Verified	x: 0 m Verified	VERIFIED
V-115: C21 - C22	x: 0 m Verified	x: 4.6 m Verified	x: 1.692 m Verified	x: 4.6 m Verified	VERIFIED
V-116: C22 - A81	x: 4.428 m Verified	x: 4.428 m Verified	x: 2.3 m Verified	x: 4.428 m Verified	VERIFIED
V-117: A63 - A64	x: 1.522 m Verified	x: 1.522 m Verified	x: 0.505 m Verified	x: 1.522 m Verified	VERIFIED
V-118: A50 - A49	x: 0 m Verified	x: 0.742 m Verified	x: 0.625 m Verified	x: 0.742 m Verified	VERIFIED
V-119: A116 - A117	x: 9.265 m Verified	x: 9.265 m Verified	x: 4.693 m Verified	x: 9.265 m Verified	VERIFIED
V-120: A65 - A66	x: 1.365 m Verified	x: 0.745 m Verified	x: 0.978 m Verified	x: 0.745 m Verified	VERIFIED
V-121: A52 - A51	x: 1.52 m Verified	x: 1.52 m Verified	x: 0.871 m Verified	x: 1.52 m Verified	VERIFIED
V-122: A97 - A96	x: 0.902 m Verified	x: 0.902 m Verified	x: 0 m Verified	x: 0.902 m Verified	VERIFIED
V-123: A96 - A95	x: 0 m Verified	x: 0 m Verified	D.N.P. ⁽¹⁾	x: 0 m Verified	VERIFIED
V-124: C15 - C16	x: 0 m Verified	x: 0 m Verified	x: 4.658 m Verified	x: 0 m Verified	VERIFIED
V-125: A118 - A119	x: 9.282 m Verified	x: 9.282 m Verified	x: 4.692 m Verified	x: 9.282 m Verified	VERIFIED
V-126: A61 - A62	x: 1.521 m Verified	x: 1.521 m Verified	x: 0.389 m Verified	x: 1.521 m Verified	VERIFIED
V-127: A48 - A47	x: 0 m Verified	x: 0.742 m Verified	x: 0.625 m Verified	x: 0.742 m Verified	VERIFIED
V-128: A46 - A45	x: 0 m Verified	x: 0 m Verified	x: 0.949 m Verified	x: 0 m Verified	VERIFIED
V-129: A83 - A84	x: 1.362 m Verified	x: 0.744 m Verified	x: 0.977 m Verified	x: 0.744 m Verified	VERIFIED
V-130: A121 - A104	x: 1.603 m Verified	x: 1.603 m Verified	x: 0.951 m Verified	x: 1.603 m Verified	VERIFIED
V-131: A104 - A89	x: 0 m Verified	x: 0 m Verified	D.N.P. ⁽¹⁾	x: 0 m Verified	VERIFIED
V-132: A87 - A88	x: 0 m Verified	x: 0 m Verified	x: 1.114 m Verified	x: 0 m Verified	VERIFIED
V-133: C7 - C8	x: 0 m Verified	x: 0 m Verified	x: 2.442 m Verified	x: 0 m Verified	VERIFIED
V-134: C8 - C9	x: 0 m Verified	x: 1.875 m Verified	x: 1.875 m Verified	x: 1.875 m Verified	VERIFIED
V-135: C9 - A39	x: 3.724 m Verified	x: 3.724 m Verified	x: 1.97 m Verified	x: 3.724 m Verified	VERIFIED



Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	$S_{F,top}$	$S_{F,Rgt.side}$	$S_{F,bot.}$	$S_{F,Lft.side}$	
V-136: A111 - C13	x: 0 m Verified	x: 0 m Verified	x: 1.757 m Verified	x: 0 m Verified	VERIFIED
V-137: C13 - A122	x: 3.897 m Verified	x: 3.897 m Verified	x: 1.432 m Verified	x: 3.897 m Verified	VERIFIED
V-138: A122 - C14	x: 0 m Verified	x: 3.192 m Verified	x: 3.192 m Verified	x: 3.192 m Verified	VERIFIED
V-139: A40 - C10	x: 0 m Verified	x: 0 m Verified	x: 2.097 m Verified	x: 0 m Verified	VERIFIED
V-140: C10 - C11	x: 0 m Verified	x: 0 m Verified	x: 2.625 m Verified	x: 0 m Verified	VERIFIED
V-141: C11 - C12	x: 4.55 m Verified	x: 1.875 m Verified	x: 1.875 m Verified	x: 1.875 m Verified	VERIFIED
V-142: C12 - A80	x: 4.427 m Verified	x: 2.3 m Verified	x: 2.3 m Verified	x: 2.3 m Verified	VERIFIED
V-143: C1 - C2	x: 0 m Verified	x: 4.492 m Verified	x: 4.492 m Verified	x: 4.492 m Verified	VERIFIED
V-144: C2 - C3	x: 9.5 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	VERIFIED
V-145: C3 - C4	x: 0 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	VERIFIED
V-146: C4 - C5	x: 0 m Verified	x: 4.775 m Verified	x: 4.775 m Verified	x: 4.775 m Verified	VERIFIED
V-147: C5 - C6	x: 9.5 m Verified	x: 5.008 m Verified	x: 5.008 m Verified	x: 5.008 m Verified	VERIFIED
V-148: C1 - C7	x: 9.5 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	VERIFIED
V-149: C7 - C15	x: 0 m Verified	x: 0 m Verified	x: 2.6 m Verified	x: 0 m Verified	VERIFIED
V-150: C15 - C17	x: 4.5 m Verified	x: 2.017 m Verified	x: 2.017 m Verified	x: 2.017 m Verified	VERIFIED
V-151: C17 - C25	x: 4.5 m Verified	x: 2.367 m Verified	x: 2.367 m Verified	x: 2.367 m Verified	VERIFIED
V-152: C2 - C9	x: 0 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	VERIFIED
V-153: C9 - C16	x: 4.5 m Verified	x: 0 m Verified	x: 2.857 m Verified	x: 0 m Verified	VERIFIED
V-154: C16 - C19	x: 0 m Verified	x: 0 m Verified	x: 2.017 m Verified	x: 0 m Verified	VERIFIED
V-155: C19 - C26	x: 4.5 m Verified	x: 4.5 m Verified	x: 2.483 m Verified	x: 4.5 m Verified	VERIFIED
V-156: A30 - A29	x: 1.026 m Verified	x: 1.026 m Verified	x: 0 m Verified	x: 1.026 m Verified	VERIFIED
V-157: A31 - A32	x: 1.036 m Verified	x: 1.036 m Verified	x: 0 m Verified	x: 1.036 m Verified	VERIFIED
V-158: A33 - A34	x: 1.597 m Verified	x: 1.597 m Verified	x: 0.537 m Verified	x: 1.597 m Verified	VERIFIED
V-159: A35 - A36	x: 1.045 m Verified	x: 1.045 m Verified	x: 0.045 m Verified	x: 1.045 m Verified	VERIFIED
V-160: A37 - A41	x: 0 m Verified	x: 0 m Verified	D.N.P. ⁽¹⁾	x: 0 m Verified	VERIFIED
V-161: A22 - A21	x: 1.026 m Verified	x: 1.026 m Verified	D.N.P. ⁽¹⁾	x: 1.026 m Verified	VERIFIED



Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	$S_{F,top}$	$S_{F,Rgt.side}$	$S_{F,bot.}$	$S_{F,Lft.side}$	
V-162: A19 - A20	x: 1.03 m Verified	x: 1.03 m Verified	x: 0.101 m Verified	x: 1.03 m Verified	VERIFIED
V-163: A23 - A24	x: 1.597 m Verified	x: 1.597 m Verified	x: 0.682 m Verified	x: 1.597 m Verified	VERIFIED
V-164: A25 - A26	x: 1.045 m Verified	x: 1.045 m Verified	x: 0.173 m Verified	x: 1.045 m Verified	VERIFIED
V-165: A27 - A42	x: 1.01 m Verified	x: 0 m Verified	x: 1.01 m Verified	x: 0 m Verified	VERIFIED
V-166: A113 - A112	x: 2.177 m Verified	x: 1.059 m Verified	x: 1.059 m Verified	x: 1.059 m Verified	VERIFIED
V-167: A53 - C20	x: 0 m Verified	x: 0 m Verified	x: 1.448 m Verified	x: 0 m Verified	VERIFIED
V-168: C20 - C27	x: 4.5 m Verified	x: 4.5 m Verified	x: 2.367 m Verified	x: 4.5 m Verified	VERIFIED
V-169: C3 - C10	x: 9.5 m Verified	x: 4.517 m Verified	x: 4.517 m Verified	x: 4.517 m Verified	VERIFIED
V-170: C10 - A56	x: 1.45 m Verified	x: 1.45 m Verified	x: 0 m Verified	x: 1.45 m Verified	VERIFIED
V-171: A57 - A58	x: 0 m Verified	x: 0 m Verified	D.N.P. ⁽¹⁾	x: 0 m Verified	VERIFIED
V-172: A58 - A55	x: 0 m Verified	x: 1.089 m Verified	x: 1.089 m Verified	x: 1.089 m Verified	VERIFIED
V-173: A55 - A54	x: 0.651 m Verified	x: 0.651 m Verified	D.N.P. ⁽¹⁾	x: 0.651 m Verified	VERIFIED
V-174: C4 - C12	x: 0 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	VERIFIED
V-175: C12 - A60	x: 3.626 m Verified	x: 0 m Verified	x: 2.675 m Verified	x: 0 m Verified	VERIFIED
V-176: A60 - A59	x: 2.175 m Verified	x: 2.175 m Verified	x: 0.855 m Verified	x: 2.175 m Verified	VERIFIED
V-177: A59 - C22	x: 0 m Verified	x: 0 m Verified	x: 1.833 m Verified	x: 0 m Verified	VERIFIED
V-178: C22 - C28	x: 4.5 m Verified	x: 4.5 m Verified	x: 2.367 m Verified	x: 4.5 m Verified	VERIFIED
V-179: A115 - A114	x: 2.177 m Verified	x: 0.972 m Verified	x: 0.972 m Verified	x: 0.972 m Verified	VERIFIED
V-180: A76 - A75	x: 0 m Verified	x: 0 m Verified	x: 1.982 m Verified	x: 0 m Verified	VERIFIED
V-181: A72 - A71	x: 1.597 m Verified	x: 1.597 m Verified	x: 0.713 m Verified	x: 1.597 m Verified	VERIFIED
V-182: A67 - A68	x: 3.053 m Verified	x: 0 m Verified	x: 1.805 m Verified	x: 0 m Verified	VERIFIED
V-183: A69 - A109	x: 3.049 m Verified	x: 3.049 m Verified	x: 1.324 m Verified	x: 3.049 m Verified	VERIFIED
V-184: A74 - A73	x: 0 m Verified	x: 0 m Verified	x: 0.774 m Verified	x: 0 m Verified	VERIFIED
V-185: A110 - A77	x: 0 m Verified	x: 0 m Verified	x: 2.026 m Verified	x: 0 m Verified	VERIFIED
V-186: C5 - C13	x: 9.5 m Verified	x: 4.05 m Verified	x: 4.05 m Verified	x: 4.05 m Verified	VERIFIED
V-187: C13 - C23	x: 9.5 m Verified	x: 9.5 m Verified	x: 4.841 m Verified	x: 9.5 m Verified	VERIFIED



Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	$S_{F,top}$	$S_{F,Rgt.side}$	$S_{F,bot.}$	$S_{F,Lft.side}$	
V-188: C23 - C29	x: 0 m Verified	x: 0 m Verified	x: 2.6 m Verified	x: 0 m Verified	VERIFIED
V-189: A120 - A99	x: 0 m Verified	x: 2.204 m Verified	x: 2.204 m Verified	x: 2.204 m Verified	VERIFIED
V-190: A99 - A98	x: 0 m Verified	x: 0 m Verified	x: 1.827 m Verified	x: 0 m Verified	VERIFIED
V-191: A85 - A86	x: 1.196 m Verified	x: 1.196 m Verified	x: 0 m Verified	x: 1.196 m Verified	VERIFIED
V-192: A94 - A93	x: 0 m Verified	x: 1.733 m Verified	x: 1.733 m Verified	x: 1.733 m Verified	VERIFIED
V-193: A108 - A107	x: 0 m Verified	x: 0 m Verified	x: 2.454 m Verified	x: 0 m Verified	VERIFIED
V-194: A107 - A106	x: 3.903 m Verified	x: 3.903 m Verified	x: 1.76 m Verified	x: 3.903 m Verified	VERIFIED
V-195: C6 - C14	x: 0 m Verified	x: 0 m Verified	x: 4.517 m Verified	x: 0 m Verified	VERIFIED
V-196: C14 - C24	x: 0 m Verified	x: 3.609 m Verified	x: 3.609 m Verified	x: 3.609 m Verified	VERIFIED
V-197: C24 - C30	x: 0 m Verified	x: 2.483 m Verified	x: 2.483 m Verified	x: 2.483 m Verified	VERIFIED
Notation: $S_{F,top}$: Comprobación de la separación máxima entre armaduras: Top face $S_{F,Rgt.side}$: Comprobación de la separación máxima entre armaduras: Right side face $S_{F,bot.}$: Comprobación de la separación máxima entre armaduras: Bottom face $S_{F,Lft.side}$: Comprobación de la separación máxima entre armaduras: Left side face x : Distance to the origin of the bar η : Usage coefficient (%) D.N.P.: Not applicable					
Checks that do not proceed (D.N.P.): ⁽¹⁾ The check does not proceed, as there is no stressed reinforcement.					

Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-101: C25 - C26	$f_{A,max}$: 5.87 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-102: C26 - C27	$f_{A,max}$: 5.03 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-103: C27 - C28	$f_{A,max}$: 5.46 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-104: C28 - C29	$f_{A,max}$: 5.03 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-105: C29 - C30	$f_{A,max}$: 5.93 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-106: A102 - C24	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.61 mm	VERIFIED
V-107: C17 - C18	$f_{A,max}$: 0.62 mm $f_{A,lim}$: 9.06 mm	VERIFIED
V-108: C18 - C19	$f_{A,max}$: 0.44 mm $f_{A,lim}$: 8.87 mm	VERIFIED
V-109: C19 - A44	$f_{A,max}$: 0.10 mm $f_{A,lim}$: 7.64 mm	VERIFIED



Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-110: A82 - C23	$f_{A,max}$: 0.16 mm $f_{A,lim}$: 7.71 mm	VERIFIED
V-111: C23 - A101	$f_{A,max}$: 0.23 mm $f_{A,lim}$: 8.02 mm	VERIFIED
V-112: A101 - A100	$f_{A,max}$: 0.06 mm $f_{A,lim}$: 4.04 mm	VERIFIED
V-113: A43 - C20	$f_{A,max}$: 0.41 mm $f_{A,lim}$: 9.17 mm	VERIFIED
V-114: C20 - C21	$f_{A,max}$: 0.43 mm $f_{A,lim}$: 8.25 mm	VERIFIED
V-115: C21 - C22	$f_{A,max}$: 0.46 mm $f_{A,lim}$: 8.61 mm	VERIFIED
V-116: C22 - A81	$f_{A,max}$: 0.41 mm $f_{A,lim}$: 9.23 mm	VERIFIED
V-117: A63 - A64	$f_{A,max}$: 0.09 mm $f_{A,lim}$: 6.34 mm	VERIFIED
V-118: A50 - A49	$f_{A,max}$: 0.01 mm $f_{A,lim}$: 2.92 mm	VERIFIED
V-119: A116 - A117	$f_{A,max}$: 3.91 mm $f_{A,lim}$: 19.30 mm	VERIFIED
V-120: A65 - A66	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 2.84 mm	VERIFIED
V-121: A52 - A51	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 3.17 mm	VERIFIED
V-122: A97 - A96	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 3.76 mm	VERIFIED
V-123: A96 - A95	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.40 mm	VERIFIED
V-124: C15 - C16	$f_{A,max}$: 5.31 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-125: A118 - A119	$f_{A,max}$: 3.57 mm $f_{A,lim}$: 19.34 mm	VERIFIED
V-126: A61 - A62	$f_{A,max}$: 0.10 mm $f_{A,lim}$: 6.34 mm	VERIFIED
V-127: A48 - A47	$f_{A,max}$: 0.01 mm $f_{A,lim}$: 2.92 mm	VERIFIED
V-128: A46 - A45	$f_{A,max}$: 0.04 mm $f_{A,lim}$: 6.33 mm	VERIFIED
V-129: A83 - A84	$f_{A,max}$: 0.01 mm $f_{A,lim}$: 2.84 mm	VERIFIED
V-130: A121 - A104	$f_{A,max}$: 0.16 mm $f_{A,lim}$: 6.68 mm	VERIFIED
V-131: A104 - A89	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.40 mm	VERIFIED
V-132: A87 - A88	$f_{A,max}$: 0.14 mm $f_{A,lim}$: 5.85 mm	VERIFIED
V-133: C7 - C8	$f_{A,max}$: 0.87 mm $f_{A,lim}$: 9.48 mm	VERIFIED



Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-134: C8 - C9	$f_{A,max}$: 0.60 mm $f_{A,lim}$: 9.25 mm	VERIFIED
V-135: C9 - A39	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 7.76 mm	VERIFIED
V-136: A111 - C13	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 6.54 mm	VERIFIED
V-137: C13 - A122	$f_{A,max}$: 0.16 mm $f_{A,lim}$: 7.03 mm	VERIFIED
V-138: A122 - C14	$f_{A,max}$: 0.28 mm $f_{A,lim}$: 10.51 mm	VERIFIED
V-139: A40 - C10	$f_{A,max}$: 0.57 mm $f_{A,lim}$: 9.18 mm	VERIFIED
V-140: C10 - C11	$f_{A,max}$: 0.50 mm $f_{A,lim}$: 8.87 mm	VERIFIED
V-141: C11 - C12	$f_{A,max}$: 0.53 mm $f_{A,lim}$: 9.11 mm	VERIFIED
V-142: C12 - A80	$f_{A,max}$: 0.59 mm $f_{A,lim}$: 9.22 mm	VERIFIED
V-143: C1 - C2	$f_{A,max}$: 8.14 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-144: C2 - C3	$f_{A,max}$: 4.68 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-145: C3 - C4	$f_{A,max}$: 5.06 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-146: C4 - C5	$f_{A,max}$: 4.91 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-147: C5 - C6	$f_{A,max}$: 5.93 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-148: C1 - C7	$f_{A,max}$: 6.46 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-149: C7 - C15	$f_{A,max}$: 0.11 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-150: C15 - C17	$f_{A,max}$: 0.15 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-151: C17 - C25	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-152: C2 - C9	$f_{A,max}$: 13.67 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-153: C9 - C16	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 5.81 mm	VERIFIED
V-154: C16 - C19	$f_{A,max}$: 0.28 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-155: C19 - C26	$f_{A,max}$: 0.40 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-156: A30 - A29	$f_{A,max}$: 0.14 mm $f_{A,lim}$: 4.27 mm	VERIFIED
V-157: A31 - A32	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 4.32 mm	VERIFIED



Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-158: A33 - A34	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 3.33 mm	VERIFIED
V-159: A35 - A36	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 4.35 mm	VERIFIED
V-160: A37 - A41	$f_{A,max}$: 0.16 mm $f_{A,lim}$: 4.19 mm	VERIFIED
V-161: A22 - A21	$f_{A,max}$: 0.27 mm $f_{A,lim}$: 4.27 mm	VERIFIED
V-162: A19 - A20	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 4.29 mm	VERIFIED
V-163: A23 - A24	$f_{A,max}$: 0.01 mm $f_{A,lim}$: 3.33 mm	VERIFIED
V-164: A25 - A26	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 4.35 mm	VERIFIED
V-165: A27 - A42	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 4.21 mm	VERIFIED
V-166: A113 - A112	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 4.54 mm	VERIFIED
V-167: A53 - C20	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 2.04 mm	VERIFIED
V-168: C20 - C27	$f_{A,max}$: 0.55 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-169: C3 - C10	$f_{A,max}$: 14.47 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-170: C10 - A56	$f_{A,max}$: 0.43 mm $f_{A,lim}$: 6.04 mm	VERIFIED
V-171: A57 - A58	$f_{A,max}$: 0.05 mm $f_{A,lim}$: 4.85 mm	VERIFIED
V-172: A58 - A55	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 4.53 mm	VERIFIED
V-173: A55 - A54	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 2.71 mm	VERIFIED
V-174: C4 - C12	$f_{A,max}$: 14.78 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-175: C12 - A60	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 7.55 mm	VERIFIED
V-176: A60 - A59	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 4.53 mm	VERIFIED
V-177: A59 - C22	$f_{A,max}$: 0.12 mm $f_{A,lim}$: 6.25 mm	VERIFIED
V-178: C22 - C28	$f_{A,max}$: 0.53 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-179: A115 - A114	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 4.54 mm	VERIFIED
V-180: A76 - A75	$f_{A,max}$: 0.07 mm $f_{A,lim}$: 6.37 mm	VERIFIED
V-181: A72 - A71	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 3.33 mm	VERIFIED

Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-182: A67 - A68	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 2.43 mm	VERIFIED
V-183: A69 - A109	$f_{A,max}$: 0.05 mm $f_{A,lim}$: 4.13 mm	VERIFIED
V-184: A74 - A73	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 6.65 mm	VERIFIED
V-185: A110 - A77	$f_{A,max}$: 0.06 mm $f_{A,lim}$: 6.38 mm	VERIFIED
V-186: C5 - C13	$f_{A,max}$: 9.66 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-187: C13 - C23	$f_{A,max}$: 2.58 mm $f_{A,lim}$: 19.05 mm	VERIFIED
V-188: C23 - C29	$f_{A,max}$: 0.37 mm $f_{A,lim}$: 9.00 mm	VERIFIED
V-189: A120 - A99	$f_{A,max}$: 0.29 mm $f_{A,lim}$: 8.81 mm	VERIFIED
V-190: A99 - A98	$f_{A,max}$: 0.09 mm $f_{A,lim}$: 5.26 mm	VERIFIED
V-191: A85 - A86	$f_{A,max}$: 0.11 mm $f_{A,lim}$: 4.98 mm	VERIFIED
V-192: A94 - A93	$f_{A,max}$: 0.09 mm $f_{A,lim}$: 6.97 mm	VERIFIED
V-193: A108 - A107	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 9.57 mm	VERIFIED
V-194: A107 - A106	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 3.01 mm	VERIFIED
V-195: C6 - C14	$f_{A,max}$: 8.93 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-196: C14 - C24	$f_{A,max}$: 1.18 mm $f_{A,lim}$: 19.03 mm	VERIFIED
V-197: C24 - C30	$f_{A,max}$: 0.26 mm $f_{A,lim}$: 9.06 mm	VERIFIED

3.2.- techo

Beams	RESISTANCE CHECKS (CIRSOC 2011-2005)																				Status	
	Arrgmt.	Reinf.	Q	Q.S	N.M	N.M.S	T	T	T.NM	T.NM	TV	TV	TVa	TVs	T.Arrgmt.	T.Arrgmt.	T.Geom.	T.Reinf.	Arrgmt.S	Cap.C		
V-201: C25 - C26	Verified	Verified	9'032 m ³ = 55.4	9'032 m ³ = 45.5	3'842 m ³ = 70.1	3'842 m ³ = 63.9	9'442 m ³ = 6.8	9'442 m ³ = 34.5	0'000 m ³ = 46.2	D.N.P. ⁽¹⁾	0'000 m ³ = 80.9	D.N.P. ⁽¹⁾	9'500 m ³ = 22.4	D.N.P. ⁽¹⁾	9'442 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 80.9
V-202: C26 - C27	Verified	Verified	9'032 m ³ = 54.7	9'032 m ³ = 45.0	4'258 m ³ = 66.2	4'258 m ³ = 60.6	0'058 m ³ = 5.9	0'000 m ³ = 30.5	9'392 m ³ = 28.6	D.N.P. ⁽¹⁾	0'058 m ³ = 77.5	D.N.P. ⁽¹⁾	0'000 m ³ = 21.7	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 77.5
V-203: C27 - C28	Verified	Verified	9'032 m ³ = 55.6	9'032 m ³ = 45.6	4'258 m ³ = 70.6	4'258 m ³ = 63.4	0'058 m ³ = 7.7	0'000 m ³ = 39.2	9'392 m ³ = 28.6	D.N.P. ⁽¹⁾	9'392 m ³ = 78.1	D.N.P. ⁽¹⁾	0'000 m ³ = 22.2	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 78.1
V-204: C28 - C29	Verified	Verified	9'032 m ³ = 54.3	9'032 m ³ = 44.8	4'258 m ³ = 65.8	4'258 m ³ = 59.8	0'058 m ³ = 6.1	0'000 m ³ = 31.7	9'392 m ³ = 28.3	D.N.P. ⁽¹⁾	0'058 m ³ = 77.6	D.N.P. ⁽¹⁾	0'000 m ³ = 21.7	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 77.6
V-205: C29 - C30	Verified	Verified	4'048 m ³ = 57.7	4'048 m ³ = 47.1	4'725 m ³ = 74.5	4'725 m ³ = 69.4	0'058 m ³ = 6.0	0'000 m ³ = 41.2	9'392 m ³ = 28.6	D.N.P. ⁽¹⁾	0'058 m ³ = 77.1	D.N.P. ⁽¹⁾	0'000 m ³ = 23.1	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 77.1
V-206: A74 - C24	Verified	Verified	0'000 m ³ = 3.5	0'000 m ³ = 0.781	0'049 m ³ = 7.2	A74 = 11.0	0'516 m ³ = 4.1	0'442 m ³ = 42.9	0'209 m ³ = 46.2	D.N.P. ⁽¹⁾	0'209 m ³ = 54.2	D.N.P. ⁽¹⁾	0'000 m ³ = 44.2	D.N.P. ⁽¹⁾	0'442 m ³ Verified	0'209 m ³ Verified	0'209 m ³ Verified	0'209 m ³ Verified	0'209 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 54.2
V-207: C17 - C18	Verified	Verified	3'725 m ³ = 43.5	3'725 m ³ = 35.5	4'308 m ³ = 55.1	4'308 m ³ = 49.7	0'308 m ³ = 9.5	4'308 m ³ = 37.9	4'308 m ³ = 46.2	D.N.P. ⁽¹⁾	4'308 m ³ = 82.9	D.N.P. ⁽¹⁾	4'550 m ³ = 28.6	D.N.P. ⁽¹⁾	4'308 m ³ Verified	4'308 m ³ Verified	4'308 m ³ Verified	4'308 m ³ Verified	4'308 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 82.9
V-208: C18 - C19	Verified	Verified	0'000 m ³ = 26.4	0'000 m ³ = 21.6	'C18' = 55.4	'C18' = 49.6	0'058 m ³ = 30.3	0'000 m ³ = 46.6	1'692 m ³ = 68.4	D.N.P. ⁽¹⁾	1'458 m ³ = 88.9	D.N.P. ⁽¹⁾	0'000 m ³ = 44.2	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	2'625 m ³ Error	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	ERROR = 54.2
V-209: C19 - A6	Verified	Verified	0'468 m ³ = 27.5	0'250 m ³ = 32.8	0'430 m ³ = 35.7	0'417 m ³ = 14.6	0'722 m ³ = 15.1	0'309 m ³ = 55.9	0'309 m ³ = 51.1	D.N.P. ⁽¹⁾	0'662 m ³ = 22.1	D.N.P. ⁽¹⁾	0'392 m ³ = 23.2	D.N.P. ⁽¹⁾	0'392 m ³ Verified	0'392 m ³ Verified	0'392 m ³ Verified	0'392 m ³ Verified	0'392 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 77.2
V-210: A55 - C23	Verified	Verified	0'000 m ³ = 32.6	0'000 m ³ = 27.9	3'485 m ³ = 35.4	A55 = 50.1	0'343 m ³ = 11.8	0'615 m ³ = 11.8	1'260 m ³ = 51.9	D.N.P. ⁽¹⁾	0'000 m ³ = 78.5	D.N.P. ⁽¹⁾	0'000 m ³ = 23.4	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 78.5
V-211: C23 - A72	Verified	Verified	0'000 m ³ = 26.2	0'000 m ³ = 21.6	'C23' = 35.5	'C23' = 36.7	2'832 m ³ = 10.8	0'665 m ³ = 55.9	0'032 m ³ = 51.9	D.N.P. ⁽¹⁾	1'458 m ³ = 78.0	D.N.P. ⁽¹⁾	3'558 m ³ = 14.4	D.N.P. ⁽¹⁾	3'066 m ³ Verified	0'032 m ³ Verified	0'032 m ³ Verified	0'032 m ³ Verified	0'032 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 78.0
V-212: A72 - A73	Verified	Verified	0'807 m ³ = 4.8	0'807 m ³ = 3.87	0'341 m ³ = 17.2	2'674 m ³ = 34.7	0'107 m ³ = 23.4	0'000 m ³ = 99.3	0'691 m ³ = 53.4	D.N.P. ⁽¹⁾	2'674 m ³ = 79.6	D.N.P. ⁽¹⁾	0'000 m ³ = 23.7	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 92.3
V-213: A7 - C20	Verified	Verified	3'933 m ³ = 34.0	0'000 m ³ = 36.8	4'191 m ³ = 39.3	A7 = 42.3	0'000 m ³ = 13.9	0'000 m ³ = 60.3	1'493 m ³ = 53.4	D.N.P. ⁽¹⁾	1'493 m ³ = 74.2	D.N.P. ⁽¹⁾	0'000 m ³ = 26.5	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED
V-214: C20 - C21	Verified	Verified	0'468 m ³ = 48.1	0'468 m ³ = 48.1	4'375 m ³ = 54.3	4'375 m ³ = 54.3	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 54.3
V-215: C21 - C22	Verified	Verified	4'132 m ³ = 39.3	4'132 m ³ = 39.0	4'132 m ³ = 65.5	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 65.5
V-216: C22 - A54	Verified	Verified	0'468 m ³ = 35.2	0'468 m ³ = 49.0	0'175 m ³ = 45.9	0'292 m ³ = 47.1	4'428 m ³ = 8.4	4'258 m ³ = 44.1	4'258 m ³ = 40.1	D.N.P. ⁽¹⁾	4'258 m ³ = 66.4	D.N.P. ⁽¹⁾	4'428 m ³ = 22.7	D.N.P. ⁽¹⁾	4'258 m ³ Verified	4'258 m ³ Verified	4'258 m ³ Verified	4'258 m ³ Verified	4'258 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED = 66.4
V-217: A48 - A49	Verified	Verified	1'054 m ³ = 40.6	1'054 m ³ = 40.6	1'205 m ³ = 40.6	1'205 m ³ = 40.6	0'038 m ³ = 52.5	0'000 m ³ = 52.5	0'000 m ³ = 52.5	D.N.P. ⁽¹⁾	0'038 m ³ = 52.5	D.N.P. ⁽¹⁾	0'000 m ³ = 52.5	D.N.P. ⁽¹⁾	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	0'000 m ³ Verified	D.N.P. ⁽¹⁾	Verified	VERIFIED



edificio 2.0

U.L.S. Checks

Date: 11/20/20

Beams	Arrgmt.	Reinf.	RESISTANCE CHECKS (CIRSOC 201-2005)																Status		
			Q	Q.S	N.M	N.M.S	T	T _s	T _u	T.M	T.M	T.V	T.V	T.V _s	T.V _s	T.Arrgmt.	T.Arrgmt.	T.Geom.		T.Reinf.	Arrgmt. S
V-218: A19 - A18	Verified	0.000 m ² Verified	0.476 m ² η = 6.3	0.933 m ² η = 24.3	0.933 m ² η = 6.6	'A18' η = 38.9	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 38.9
V-219: A46 - A47	Verified	Verified	8.797 m ² η = 57.6	8.797 m ² η = 51.0	4.226 m ² η = 64.9	8.893 m ² η = 68.1	0.026 m ² η = 5.0	0.000 m ² η = 24.6	0.000 m ² η = 30.5	D.N.P. ⁽¹⁾	0.000 m ² η = 72.3	D.N.P. ⁽¹⁾	0.000 m ² η = 24.1	D.N.P. ⁽¹⁾	0.000 m ² η = 24.1	0.000 m ² η = 24.1	0.000 m ² η = 24.1	0.000 m ² η = 24.1	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 72.3
V-220: A50 - A51	Verified	Verified	0.897 m ² η = 8.4	0.000 m ² η = 22.7	0.992 m ² η = 9.3	'A50' η = 37.8	0.089 m ² η = 5.0	0.059 m ² η = 25.7	0.059 m ² η = 53.4	D.N.P. ⁽¹⁾	0.059 m ² η = 72.3	D.N.P. ⁽¹⁾	0.059 m ² η = 10.2	D.N.P. ⁽¹⁾	0.059 m ² η = 10.2	0.059 m ² η = 10.2	0.059 m ² η = 10.2	0.059 m ² η = 10.2	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 72.3
V-221: A16 - A17	Verified	Verified	1.052 m ² η = 9.7	1.052 m ² η = 36.9	1.153 m ² η = 12.9	1.153 m ² η = 50.4	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 50.4
V-222: A77 - A78	Verified	Verified	0.000 m ² η = 20.7	0.000 m ² η = 43.6	0.570 m ² η = 15.3	'A77' η = 29.9	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 43.6
V-223: A78 - A79	Verified	Verified	0.000 m ² η = 6.4	0.685 m ² η = 19.3	'A78' η = 13.9	'A79' η = 25.1	1.103 m ² η = 5.2	1.103 m ² η = 26.9	1.103 m ² η = 53.4	D.N.P. ⁽¹⁾	1.153 m ² η = 70.4	D.N.P. ⁽¹⁾	1.153 m ² η = 8.8	D.N.P. ⁽¹⁾	1.103 m ² η = 8.8	1.103 m ² η = 8.8	1.103 m ² η = 8.8	1.103 m ² η = 8.8	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 70.4
V-224: C15 - C16	Verified	Verified	9.032 m ² η = 59.4	9.032 m ² η = 50.5	9.142 m ² η = 91.6	9.142 m ² η = 90.9	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 91.6
V-225: A44 - A45	Verified	Verified	8.814 m ² η = 59.1	8.814 m ² η = 52.4	4.224 m ² η = 64.9	8.891 m ² η = 66.2	0.024 m ² η = 7.1	0.000 m ² η = 26.3	0.000 m ² η = 30.5	D.N.P. ⁽¹⁾	0.000 m ² η = 76.6	D.N.P. ⁽¹⁾	0.000 m ² η = 26.1	D.N.P. ⁽¹⁾	0.000 m ² η = 26.1	0.000 m ² η = 26.1	0.000 m ² η = 26.1	0.000 m ² η = 26.1	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 76.6
V-226: A63 - A62	Verified	Verified	1.053 m ² η = 7.9	1.053 m ² η = 30.4	1.205 m ² η = 11.0	'A63' η = 40.5	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 40.5
V-227: A21 - A20	Verified	Verified	0.000 m ² η = 6.1	0.035 m ² η = 22.6	0.935 m ² η = 5.9	'A20' η = 37.4	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 37.4
V-228: A14 - A15	Verified	Verified	1.052 m ² η = 8.7	1.052 m ² η = 34.4	1.151 m ² η = 12.3	1.151 m ² η = 47.9	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 47.9
V-229: A60 - A61	Verified	Verified	0.656 m ² η = 6.7	0.000 m ² η = 23.3	0.991 m ² η = 8.0	'A60' η = 35.7	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 35.7
V-230: A96 - A85	Verified	Verified	1.135 m ² η = 5.6	0.625 m ² η = 11.3	'A96' η = 9.3	'A96' η = 17.6	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 17.6
V-231: A85 - A84	Verified	Verified	0.000 m ² η = 3.6	0.682 m ² η = 5.3	'A85' η = 16.25	'A85' η = 26.5	1.055 m ² η = 8.0	1.055 m ² η = 41.7	0.589 m ² η = 53.4	D.N.P. ⁽¹⁾	0.822 m ² η = 72.7	D.N.P. ⁽¹⁾	1.100 m ² η = 13.0	D.N.P. ⁽¹⁾	1.055 m ² η = 13.0	0.589 m ² η = 13.0	0.589 m ² η = 13.0	0.589 m ² η = 13.0	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 72.7
V-232: A88 - A89	Verified	Verified	0.000 m ² η = 5.3	0.000 m ² η = 11.9	'A88' η = 4.9	'A88' η = 20.4	0.076 m ² η = 12.4	0.052 m ² η = 64.3	0.000 m ² η = 53.4	D.N.P. ⁽¹⁾	0.000 m ² η = 67.5	D.N.P. ⁽¹⁾	0.052 m ² η = 14.9	D.N.P. ⁽¹⁾	0.052 m ² η = 14.9	0.000 m ² η = 14.9	0.000 m ² η = 14.9	0.000 m ² η = 14.9	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 67.5
V-233: C7 - C8	Verified	Verified	1.375 m ² η = 43.0	1.375 m ² η = 35.0	2.908 m ² η = 52.0	'C7' η = 47.2	4.550 m ² η = 10.7	4.308 m ² η = 40.8	4.308 m ² η = 35.0	D.N.P. ⁽¹⁾	4.308 m ² η = 63.4	D.N.P. ⁽¹⁾	4.550 m ² η = 28.8	D.N.P. ⁽¹⁾	4.308 m ² η = 28.8	4.308 m ² η = 28.8	4.308 m ² η = 28.8	4.308 m ² η = 28.8	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 63.4
V-234: C8 - C9	Verified	Verified	0.808 m ² η = 35.1	0.808 m ² η = 28.1	4.550 m ² η = 37.3	'C9' η = 34.6	0.000 m ² η = 30.0	0.000 m ² η = 74.1	0.000 m ² η = 50.7	D.N.P. ⁽¹⁾	1.508 m ² η = 66.0	D.N.P. ⁽¹⁾	0.000 m ² η = 39.4	D.N.P. ⁽¹⁾	0.000 m ² η = 39.4	0.000 m ² η = 39.4	0.000 m ² η = 39.4	0.000 m ² η = 39.4	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 50.7
V-235: C9 - A0	Verified	Verified	1.356 m ² η = 28.1	1.356 m ² η = 30.6	0.101 m ² η = 42.7	0.101 m ² η = 43.6	3.558 m ² η = 20.0	3.558 m ² η = 91.7	0.758 m ² η = 65.0	D.N.P. ⁽¹⁾	1.692 m ² η = 76.7	D.N.P. ⁽¹⁾	3.601 m ² η = 25.0	D.N.P. ⁽¹⁾	3.558 m ² η = 25.0	0.758 m ² η = 25.0	0.758 m ² η = 25.0	0.758 m ² η = 25.0	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 91.7
V-236: A71 - C13	Verified	Verified	0.000 m ² η = 33.2	0.000 m ² η = 35.5	'A71' η = 32.1	'A71' η = 42.6	0.173 m ² η = 22.1	0.139 m ² η = 88.3	1.539 m ² η = 53.4	D.N.P. ⁽¹⁾	1.072 m ² η = 68.5	D.N.P. ⁽¹⁾	0.139 m ² η = 29.1	D.N.P. ⁽¹⁾	0.139 m ² η = 29.1	0.000 m ² η = 29.1	0.000 m ² η = 29.1	0.000 m ² η = 29.1	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 88.3
V-237: C13 - A98	Verified	Verified	1.329 m ² η = 18.2	1.329 m ² η = 15.2	3.429 m ² η = 23.2	3.375 m ² η = 23.2	0.032 m ² η = 7.9	0.000 m ² η = 41.0	0.000 m ² η = 53.4	D.N.P. ⁽¹⁾	0.000 m ² η = 62.7	D.N.P. ⁽¹⁾	0.000 m ² η = 8.9	D.N.P. ⁽¹⁾	0.000 m ² η = 8.9	0.000 m ² η = 8.9	0.000 m ² η = 8.9	0.000 m ² η = 8.9	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 62.7
V-238: A98 - C14	Verified	Verified	0.468 m ² η = 10.9	0.468 m ² η = 10.9	0.345 m ² η = 18.4	0.468 m ² η = 20.3	5.303 m ² η = 13.5	5.245 m ² η = 13.5	3.611 m ² η = 49.4	D.N.P. ⁽¹⁾	5.245 m ² η = 49.4	D.N.P. ⁽¹⁾	5.303 m ² η = 14.6	D.N.P. ⁽¹⁾	5.245 m ² η = 14.6	3.611 m ² η = 14.6	3.611 m ² η = 14.6	3.611 m ² η = 14.6	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 58.9
V-239: A10 - C10	Verified	Verified	0.000 m ² η = 35.7	0.000 m ² η = 35.6	'A1' η = 41.8	'A1' η = 51.7	0.098 m ² η = 21.7	0.000 m ² η = 66.8	0.000 m ² η = 43.9	D.N.P. ⁽¹⁾	1.732 m ² η = 78.3	D.N.P. ⁽¹⁾	0.000 m ² η = 32.4	D.N.P. ⁽¹⁾	0.000 m ² η = 32.4	0.000 m ² η = 32.4	0.000 m ² η = 32.4	0.000 m ² η = 32.4	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 43.9
V-240: C10 - C11	Verified	Verified	0.000 m ² η = 37.1	0.000 m ² η = 29.9	4.258 m ² η = 41.2	4.258 m ² η = 38.2	4.258 m ² η = 17.2	4.258 m ² η = 80.5	0.058 m ² η = 43.9	D.N.P. ⁽¹⁾	2.208 m ² η = 87.0	D.N.P. ⁽¹⁾	4.550 m ² η = 27.1	D.N.P. ⁽¹⁾	4.258 m ² η = 27.1	0.058 m ² η = 27.1	0.058 m ² η = 27.1	0.058 m ² η = 27.1	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 87.0
V-241: C11 - C12	Verified	Verified	4.082 m ² η = 29.7	0.292 m ² η = 29.7	0.267 m ² η = 29.7	0.000 m ² η = 29.7	0.000 m ² η = 29.7	0.292 m ² η = 29.7	0.292 m ² η = 29.7	D.N.P. ⁽¹⁾	1.642 m ² η = 87.2	D.N.P. ⁽¹⁾	0.000 m ² η = 32.9	D.N.P. ⁽¹⁾	0.000 m ² η = 32.9	0.000 m ² η = 32.9	0.000 m ² η = 32.9	0.000 m ² η = 32.9	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 87.2
V-242: C12 - A2	Verified	Verified	3.959 m ² η = 36.5	3.959 m ² η = 36.4	4.050 m ² η = 44.5	4.025 m ² η = 55.2	4.308 m ² η = 22.0	4.308 m ² η = 64.2	3.700 m ² η = 44.0	D.N.P. ⁽¹⁾	4.025 m ² η = 80.3	D.N.P. ⁽¹⁾	4.427 m ² η = 33.2	D.N.P. ⁽¹⁾							



U.L.S. Checks

edificio 2.0

Date: 11/20/20

Beams	RESISTANCE CHECKS (CIRSOC 201-2005)																			Status		
	Arrgmt.	Reinf.	Q	Q.S.	N,M	N.M.S.	T ₁	T ₂	T ₃	TNM	TNC	TV	TV _s	TV _s	T _{Arrgmt.}	T _{Arrgmt.}	T _{Geom.}	T _{Reinf.}	Arrgmt. S.		Cap. C	
V-290: C23 - C29	Verified	Verified	'0.468 m' η = 57.4	'0.468 m' η = 48.1	'0.267 m' η = 85.4	'0.150 m' η = 77.6	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 85.4	
V-291: A97 - A76	Verified	Verified	'0.000 m' η = 32.6	'0.000 m' η = 38.1	'0.697 m' η = 52.4	'0.059 m' η = 80.5	'0.026 m' η = 15.5	'1.193 m' η = 80.7	D.N.P. ⁽¹⁾	'0.000 m' η = 80.5	D.N.P. ⁽¹⁾	'0.026 m' η = 25.2	D.N.P. ⁽¹⁾	'0.026 m' η = 13.8	'0.000 m' η = 13.8	'0.000 m' η = 13.8	'0.000 m' η = 13.8	'0.000 m' η = 13.8	'0.000 m' η = 13.8	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 85.0
V-292: A76 - A75	Verified	Verified	'0.777 m' η = 11.1	'0.777 m' η = 15.9	'0.660 m' η = 20.0	'2.877 m' η = 41.0	'0.097 m' η = 13.8	'0.000 m' η = 70.6	'3.227 m' η = 53.4	D.N.P. ⁽¹⁾	'3.227 m' η = 85.0	D.N.P. ⁽¹⁾	'0.097 m' η = 13.8	D.N.P. ⁽¹⁾	Verified	'0.000 m' η = 13.8	'0.000 m' η = 13.8	'0.000 m' η = 13.8	'0.000 m' η = 13.8	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 56.3
V-293: A90 - A91	Verified	Verified	'0.728 m' η = 38.9	'0.728 m' η = 45.3	'0.812 m' η = 45.0	'0.812 m' η = 56.3	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 63.7
V-294: A83 - A82	Verified	Verified	'0.468 m' η = 21.8	'2.879 m' η = 38.0	'0.411 m' η = 19.9	'2.879 m' η = 43.4	'0.000 m' η = 6.2	'0.000 m' η = 32.4	'0.000 m' η = 40.1	D.N.P. ⁽¹⁾	'0.022 m' η = 63.7	D.N.P. ⁽¹⁾	'0.022 m' η = 17.1	D.N.P. ⁽¹⁾	'0.000 m' η = 17.1	'0.000 m' η = 17.1	'0.000 m' η = 17.1	'0.000 m' η = 17.1	'0.000 m' η = 17.1	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 35.1
V-295: A87 - A80	Verified	Verified	'0.000 m' η = 20.0	'0.000 m' η = 20.3	'0.000 m' η = 20.3	'0.000 m' η = 20.3	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 32.9
V-296: A80 - A81	Verified	Verified	'3.435 m' η = 11.1	'3.435 m' η = 12.4	'3.435 m' η = 25.7	'3.435 m' η = 32.9	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 80.1
V-297: C6 - C14	Verified	Verified	'0.000 m' η = 39.4	'0.000 m' η = 32.8	'0.000 m' η = 65.1	'0.000 m' η = 55.7	'0.083 m' η = 12.9	'0.000 m' η = 66.7	'0.000 m' η = 46.2	D.N.P. ⁽¹⁾	'0.000 m' η = 80.1	D.N.P. ⁽¹⁾	'0.000 m' η = 19.6	D.N.P. ⁽¹⁾	Verified	'0.000 m' η = 17.1	'0.000 m' η = 17.1	'0.000 m' η = 17.1	'0.000 m' η = 17.1	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 43.8
V-298: C14 - C24	Verified	Verified	'0.000 m' η = 31.9	'0.000 m' η = 32.2	'0.201 m' η = 43.8	'0.201 m' η = 40.6	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 67.9
V-299: C24 - C30	Verified	Verified	'1.883 m' η = 16.2	'4.032 m' η = 16.0	'2.133 m' η = 23.2	'0.468 m' η = 24.5	'4.500 m' η = 6.6	'4.350 m' η = 34.4	'4.350 m' η = 53.4	D.N.P. ⁽¹⁾	'4.350 m' η = 67.9	D.N.P. ⁽¹⁾	'4.500 m' η = 8.4	D.N.P. ⁽¹⁾	Verified	'0.000 m' η = 17.1	'0.000 m' η = 17.1	'0.000 m' η = 17.1	'0.000 m' η = 17.1	D.N.P. ⁽¹⁾	Verified	VERIFIED η = 67.9

Beams	RESISTANCE CHECKS (CIRSOC 201-2005)																				Status		
	Arrgmt.	Reinf.	Q	Q.S.	N.M	N.M.S.	T ₁	T ₂	T ₃	TNM.	TNM.	TV.	TV.	TV _s	TV _s	T.Arrgmt.	T.Arrgmt.	T.Geom.	T.Reinf.	Arrgmt. S.		Vib.	Cap. C
V-255: C9 - C16	'3.141 m' Error ⁽¹⁾	Verified	'0.568 m' η = 51.5	'0.568 m' η = 43.4	'0.245 m' η = 53.6	'0.341 m' η = 46.6	'4.307 m' η = 9.5	'4.307 m' η = 62.5	'2.950 m' η = 61.8	D.N.P. ⁽¹⁾	'2.250 m' η = 75.0	D.N.P. ⁽¹⁾	'0.107 m' η = 20.2	D.N.P. ⁽¹⁾	'4.307 m' Verified	'0.107 m' Verified	'0.107 m' Verified	'0.107 m' Verified	'0.107 m' Verified	D.N.P. ⁽¹⁾	Error ⁽¹⁾	Verified	ERROR
V-256: C16 - C19	'0.000 m' Error ⁽¹⁾	Verified	'0.932 m' η = 35.5	'0.932 m' η = 31.6	'4.045 m' η = 43.2	'3.974 m' η = 45.0	'0.241 m' η = 7.8	'0.150 m' η = 51.3	'1.550 m' η = 48.7	D.N.P. ⁽¹⁾	'1.550 m' η = 61.4	D.N.P. ⁽¹⁾	'0.150 m' η = 16.0	D.N.P. ⁽¹⁾	'0.150 m' Verified	'0.150 m' Verified	'0.150 m' Verified	'0.150 m' Verified	'0.150 m' Verified	D.N.P. ⁽¹⁾	Error ⁽¹⁾	Verified	ERROR

Notation:

Arrgmt.: Reinforcement arrangement

Reinf.: Minimum and maximum reinforcement

Q: Ultimate shear resistance (non-seismic combinations)

Q.S.: Ultimate limit state for shear (seismic combinations)

N,M: Limit state at failure under normal stresses (non-seismic combinations)

N,M.S.: Ultimate limit state for normal conditions (seismic combinations)

T.: Torsion failure limit state. Oblique compression.

T_{st}: Torsion failure limit state. Tension in the web.

T_{st}: Torsion failure limit state. Tension in the longitudinal reinforcement.

TNM.: Torsion failure limit state. Interaction between torsion and normal forces. Moment about the X-axis.

TNM_y: Torsion failure limit state. Interaction between torsion and normal forces. Moment about the Y-axis.

TV_x: Torsion failure limit state. Interaction between torsion and shear in the X-axis. Oblique compression

TV_y: Torsion failure limit state. Interaction between torsion and shear in the Y-axis. Oblique compression

TV_s: Torsion failure limit state. Interaction between torsion and shear in the X-axis. Tension in the web.

TV_s: Torsion failure limit state. Interaction between torsion and shear in the Y-axis. Tension in the web.

T_{Arrgmt.}: Torsion failure limit state. Spacing of longitudinal reinforcement bars.

T_{Arrgmt.}: Torsion failure limit state. Spacing of the transverse reinforcement bars.

T_{Geom.}: Torsion failure limit state. Minimum diameter of the longitudinal reinforcement.

T_{Reinf.}: Torsion failure limit state. Minimum closed stirrup steel area.

Arrgmt. S.: Seismic design criteria

Cap. C: Resistencia al corte, 2.2.8

x: Distance to the origin of the bar

η: Usage coefficient (%)

D.N.P.: Not applicable

Vib.: Separation required to introduce the vibrator

Checks that do not proceed (D.N.P.):

⁽¹⁾ The check does not proceed, as there is no interaction between torsional forces and normal forces.

⁽²⁾ There is no interaction between torsion and shear for any combination. Therefore, the check does not proceed.

⁽³⁾ Debido a la categoría de diseño sísmico de la estructura, no se realiza ninguna comprobación en cuanto a criterios de diseño por sismo.

⁽⁴⁾ The failure limit state check due to torsion does not proceed, because there is no torsional moment.

Errors:

⁽¹⁾ Not verified: 'Torsion failure limit state. Minimum diameter of the longitudinal reinforcement.'

⁽²⁾ Not verified: 'Reinforcement arrangement' (Longitudinal reinforcement)

⁽³⁾ The maximum free separation available between the longitudinal bars (18.00 mm) is less than what is required to introduce the vibrator (20.00 mm).

Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	S _{F,top}	S _{F,Rgt.side}	S _{F,bot.}	S _{F,Lft.side}	
V-201: C25 - C26	x: 9.5 m Verified	x: 4.308 m Verified	x: 4.308 m Verified	x: 4.308 m Verified	VERIFIED
V-202: C26 - C27	x: 0 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	VERIFIED
V-203: C27 - C28	x: 9.5 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	VERIFIED
V-204: C28 - C29	x: 0 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	VERIFIED
V-205: C29 - C30	x: 0 m Verified	x: 5.192 m Verified	x: 5.192 m Verified	x: 5.192 m Verified	VERIFIED
V-206: A74 - C24	x: 1.233 m Verified	x: 0.516 m Verified	x: 0.516 m Verified	x: 0.516 m Verified	VERIFIED



U.L.S. Checks

Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	$S_{F,top}$	$S_{F,Rgt.side}$	$S_{F,bot.}$	$S_{F,Lft.side}$	
V-207: C17 - C18	x: 0 m Verified	x: 2.325 m Verified	x: 2.325 m Verified	x: 2.325 m Verified	VERIFIED
V-208: C18 - C19	x: 0 m Verified	x: 0 m Verified	x: 2.067 m Verified	x: 0 m Verified	VERIFIED
V-209: C19 - A6	x: 3.718 m Verified	x: 3.718 m Verified	x: 1.967 m Verified	x: 3.718 m Verified	VERIFIED
V-210: A55 - C23	x: 3.702 m Verified	x: 0 m Verified	x: 1.852 m Verified	x: 0 m Verified	VERIFIED
V-211: C23 - A72	x: 0 m Verified	x: 0 m Verified	x: 1.925 m Verified	x: 0 m Verified	VERIFIED
V-212: A72 - A73	x: 3.099 m Verified	x: 0.341 m Verified	x: 1.741 m Verified	x: 0.341 m Verified	VERIFIED
V-213: A7 - C20	x: 0 m Verified	x: 0 m Verified	x: 1.96 m Verified	x: 0 m Verified	VERIFIED
V-214: C20 - C21	x: 4.6 m Verified	x: 4.6 m Verified	x: 2.625 m Verified	x: 4.6 m Verified	VERIFIED
V-215: C21 - C22	x: 0 m Verified	x: 0 m Verified	x: 1.925 m Verified	x: 0 m Verified	VERIFIED
V-216: C22 - A54	x: 0 m Verified	x: 0 m Verified	x: 2.392 m Verified	x: 0 m Verified	VERIFIED
V-217: A48 - A49	x: 1.522 m Verified	x: 1.522 m Verified	x: 0.622 m Verified	x: 1.522 m Verified	VERIFIED
V-218: A19 - A18	x: 0 m Verified	x: 1.176 m Verified	x: 1.176 m Verified	x: 1.176 m Verified	VERIFIED
V-219: A46 - A47	x: 9.265 m Verified	x: 4.693 m Verified	x: 4.693 m Verified	x: 4.693 m Verified	VERIFIED
V-220: A50 - A51	x: 1.365 m Verified	x: 1.365 m Verified	x: 0 m Verified	x: 1.365 m Verified	VERIFIED
V-221: A16 - A17	x: 1.52 m Verified	x: 1.52 m Verified	x: 0.558 m Verified	x: 1.52 m Verified	VERIFIED
V-222: A77 - A78	x: 0.902 m Verified	x: 0.902 m Verified	x: 0 m Verified	x: 0.902 m Verified	VERIFIED
V-223: A78 - A79	x: 0 m Verified	x: 0 m Verified	x: 1.103 m Verified	x: 0 m Verified	VERIFIED
V-224: C15 - C16	x: 9.5 m Verified	x: 9.5 m Verified	x: 3.958 m Verified	x: 9.5 m Verified	VERIFIED
V-225: A44 - A45	x: 9.282 m Verified	x: 4.691 m Verified	x: 4.691 m Verified	x: 4.691 m Verified	VERIFIED
V-226: A63 - A62	x: 1.521 m Verified	x: 1.521 m Verified	x: 0.739 m Verified	x: 1.521 m Verified	VERIFIED
V-227: A21 - A20	x: 0 m Verified	x: 1.017 m Verified	x: 1.017 m Verified	x: 1.017 m Verified	VERIFIED
V-228: A14 - A15	x: 1.52 m Verified	x: 1.52 m Verified	D.N.P. ⁽¹⁾	x: 1.52 m Verified	VERIFIED
V-229: A60 - A61	x: 1.362 m Verified	x: 1.362 m Verified	x: 0 m Verified	x: 1.362 m Verified	VERIFIED
V-230: A96 - A85	x: 0.334 m Verified	x: 0.334 m Verified	D.N.P. ⁽¹⁾	x: 0.334 m Verified	VERIFIED
V-231: A85 - A84	x: 0 m Verified	x: 0.634 m Verified	x: 0.634 m Verified	x: 0.634 m Verified	VERIFIED
V-232: A88 - A89	x: 0 m Verified	x: 0.752 m Verified	x: 0.752 m Verified	x: 0.752 m Verified	VERIFIED



Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	$S_{F,top}$	$S_{F,Rgt.side}$	$S_{F,bot.}$	$S_{F,Lft.side}$	
V-233: C7 - C8	x: 0 m Verified	x: 2.442 m Verified	x: 2.442 m Verified	x: 2.442 m Verified	VERIFIED
V-234: C8 - C9	x: 4.55 m Verified	x: 4.55 m Verified	x: 2.158 m Verified	x: 4.55 m Verified	VERIFIED
V-235: C9 - A0	x: 0 m Verified	x: 0 m Verified	x: 1.967 m Verified	x: 0 m Verified	VERIFIED
V-236: A71 - C13	x: 0 m Verified	x: 0 m Verified	x: 1.772 m Verified	x: 0 m Verified	VERIFIED
V-237: C13 - A98	x: 3.897 m Verified	x: 1.432 m Verified	x: 1.432 m Verified	x: 1.432 m Verified	VERIFIED
V-238: A98 - C14	x: 0 m Verified	x: 0 m Verified	x: 3.145 m Verified	x: 0 m Verified	VERIFIED
V-239: A1 - C10	x: 0 m Verified	x: 0 m Verified	x: 2.097 m Verified	x: 0 m Verified	VERIFIED
V-240: C10 - C11	x: 0 m Verified	x: 2.675 m Verified	x: 2.675 m Verified	x: 2.675 m Verified	VERIFIED
V-241: C11 - C12	x: 4.55 m Verified	x: 2.108 m Verified	x: 2.108 m Verified	x: 2.108 m Verified	VERIFIED
V-242: C12 - A2	x: 4.427 m Verified	x: 4.427 m Verified	x: 2.3 m Verified	x: 4.427 m Verified	VERIFIED
V-243: C1 - C2	x: 9.5 m Verified	x: 4.308 m Verified	x: 4.308 m Verified	x: 4.308 m Verified	VERIFIED
V-244: C2 - C3	x: 0 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	x: 4.725 m Verified	VERIFIED
V-245: C3 - C4	x: 9.5 m Verified	x: 4.775 m Verified	x: 4.775 m Verified	x: 4.775 m Verified	VERIFIED
V-246: C4 - C5	x: 0 m Verified	x: 4.775 m Verified	x: 4.775 m Verified	x: 4.775 m Verified	VERIFIED
V-247: C5 - C6	x: 0 m Verified	x: 5.242 m Verified	x: 5.242 m Verified	x: 5.242 m Verified	VERIFIED
V-248: C1 - C7	x: 0 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	VERIFIED
V-249: C7 - C15	x: 0.85 m Verified	x: 0 m Verified	x: 2.95 m Verified	x: 0 m Verified	VERIFIED
V-250: C15 - C17	x: 4.5 m Verified	x: 2.017 m Verified	x: 2.017 m Verified	x: 2.017 m Verified	VERIFIED
V-251: C17 - C25	x: 0 m Verified	x: 2.6 m Verified	x: 2.6 m Verified	x: 2.6 m Verified	VERIFIED
V-252: C8 - A5	x: 0 m Verified	x: 0 m Verified	x: 4.7 m Verified	x: 0 m Verified	VERIFIED
V-253: A5 - C18	x: 4.7 m Verified	x: 4.7 m Verified	x: 0.25 m Verified	x: 4.7 m Verified	VERIFIED
V-254: C2 - C9	x: 0 m Verified	x: 0 m Verified	x: 7.2 m Verified	x: 0 m Verified	VERIFIED
V-255: C9 - C16	x: 0 m Verified	x: 0 m Verified	x: 2.812 m Verified	x: 0 m Verified	VERIFIED
V-256: C16 - C19	x: 4.5 m Verified	x: 4.5 m Verified	x: 3.041 m Verified	x: 4.5 m Verified	VERIFIED
V-257: C19 - C26	x: 0 m Verified	x: 2.717 m Verified	x: 2.717 m Verified	x: 2.717 m Verified	VERIFIED
V-258: A25 - A24	x: 1.026 m Verified	x: 1.026 m Verified	D.N.P. ⁽¹⁾	x: 1.026 m Verified	VERIFIED



Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	$S_{F,top}$	$S_{F,Rgt.side}$	$S_{F,bot.}$	$S_{F,Lft.side}$	
V-259: A26 - A27	x: 1.036 m Verified	x: 1.036 m Verified	D.N.P. ⁽¹⁾	x: 1.036 m Verified	VERIFIED
V-260: A28 - A29	x: 1.597 m Verified	x: 1.597 m Verified	x: 0.587 m Verified	x: 1.597 m Verified	VERIFIED
V-261: A30 - A31	x: 1.045 m Verified	x: 1.045 m Verified	x: 0.328 m Verified	x: 1.045 m Verified	VERIFIED
V-262: A32 - A33	x: 0 m Verified	x: 0 m Verified	D.N.P. ⁽¹⁾	x: 0 m Verified	VERIFIED
V-263: A23 - A22	x: 1.026 m Verified	x: 1.026 m Verified	D.N.P. ⁽¹⁾	x: 1.026 m Verified	VERIFIED
V-264: A41 - A40	x: 1.03 m Verified	x: 1.03 m Verified	D.N.P. ⁽¹⁾	x: 1.03 m Verified	VERIFIED
V-265: A38 - A39	x: 1.597 m Verified	x: 1.597 m Verified	x: 0.595 m Verified	x: 1.597 m Verified	VERIFIED
V-266: A36 - A37	x: 1.045 m Verified	x: 1.045 m Verified	x: 0 m Verified	x: 1.045 m Verified	VERIFIED
V-267: A34 - A35	x: 0 m Verified	x: 0 m Verified	D.N.P. ⁽¹⁾	x: 0 m Verified	VERIFIED
V-268: A92 - A93	x: 2.177 m Verified	x: 2.177 m Verified	x: 1.089 m Verified	x: 2.177 m Verified	VERIFIED
V-269: A8 - C20	x: 1.285 m Verified	x: 1.285 m Verified	D.N.P. ⁽¹⁾	x: 1.285 m Verified	VERIFIED
V-270: C20 - C27	x: 0 m Verified	x: 2.483 m Verified	x: 2.483 m Verified	x: 2.483 m Verified	VERIFIED
V-271: C3 - C10	x: 0 m Verified	x: 0 m Verified	x: 7.317 m Verified	x: 0 m Verified	VERIFIED
V-272: C10 - A13	x: 0 m Verified	x: 0.936 m Verified	D.N.P. ⁽¹⁾	x: 0.936 m Verified	VERIFIED
V-273: A12 - A11	x: 1.165 m Verified	x: 1.165 m Verified	x: 0.446 m Verified	x: 1.165 m Verified	VERIFIED
V-274: A11 - A10	x: 0 m Verified	x: 1.09 m Verified	x: 1.09 m Verified	x: 1.09 m Verified	VERIFIED
V-275: A10 - A9	x: 0.651 m Verified	x: 0.651 m Verified	D.N.P. ⁽¹⁾	x: 0.651 m Verified	VERIFIED
V-276: C4 - C12	x: 0 m Verified	x: 0 m Verified	x: 7.317 m Verified	x: 0 m Verified	VERIFIED
V-277: C12 - A43	x: 0 m Verified	x: 0 m Verified	x: 2.467 m Verified	x: 0 m Verified	VERIFIED
V-278: A43 - A42	x: 2.175 m Verified	x: 2.175 m Verified	x: 1.087 m Verified	x: 2.175 m Verified	VERIFIED
V-279: A42 - C22	x: 0 m Verified	x: 3.099 m Verified	x: 1.383 m Verified	x: 3.099 m Verified	VERIFIED
V-280: C22 - C28	x: 0 m Verified	x: 2.483 m Verified	x: 2.483 m Verified	x: 2.483 m Verified	VERIFIED
V-281: A94 - A95	x: 2.177 m Verified	x: 2.177 m Verified	x: 1.089 m Verified	x: 2.177 m Verified	VERIFIED
V-282: A57 - A56	x: 0 m Verified	x: 0 m Verified	D.N.P. ⁽¹⁾	x: 0 m Verified	VERIFIED
V-283: A58 - A59	x: 1.597 m Verified	x: 1.597 m Verified	D.N.P. ⁽¹⁾	x: 1.597 m Verified	VERIFIED
V-284: A52 - A53	x: 0 m Verified	x: 0 m Verified	D.N.P. ⁽¹⁾	x: 0 m Verified	VERIFIED



Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	$S_{F,top}$	$S_{F,Rgt.side}$	$S_{F,bot.}$	$S_{F,Lft.side}$	
V-285: A66 - A70	x: 3.049 m Verified	x: 3.049 m Verified	x: 1.257 m Verified	x: 3.049 m Verified	VERIFIED
V-286: A64 - A65	x: 0 m Verified	x: 0 m Verified	x: 0.824 m Verified	x: 0 m Verified	VERIFIED
V-287: A69 - A68	x: 0 m Verified	x: 0 m Verified	x: 2.076 m Verified	x: 0 m Verified	VERIFIED
V-288: C5 - C13	x: 9.5 m Verified	x: 3.817 m Verified	x: 3.817 m Verified	x: 3.817 m Verified	VERIFIED
V-289: C13 - C23	x: 9.5 m Verified	x: 4.75 m Verified	x: 4.75 m Verified	x: 4.75 m Verified	VERIFIED
V-290: C23 - C29	x: 0 m Verified	x: 0 m Verified	x: 2.717 m Verified	x: 0 m Verified	VERIFIED
V-291: A97 - A76	x: 0 m Verified	x: 0 m Verified	x: 2.159 m Verified	x: 0 m Verified	VERIFIED
V-292: A76 - A75	x: 3.303 m Verified	x: 0.194 m Verified	x: 1.827 m Verified	x: 0.194 m Verified	VERIFIED
V-293: A90 - A91	x: 1.196 m Verified	x: 1.196 m Verified	x: 0 m Verified	x: 1.196 m Verified	VERIFIED
V-294: A83 - A82	x: 0 m Verified	x: 1.734 m Verified	x: 1.734 m Verified	x: 1.734 m Verified	VERIFIED
V-295: A87 - A80	x: 0 m Verified	x: 0 m Verified	x: 2.569 m Verified	x: 0 m Verified	VERIFIED
V-296: A80 - A81	x: 3.903 m Verified	x: 3.903 m Verified	D.N.P. ⁽¹⁾	x: 3.903 m Verified	VERIFIED
V-297: C6 - C14	x: 0 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	x: 4.283 m Verified	VERIFIED
V-298: C14 - C24	x: 0 m Verified	x: 0 m Verified	x: 3.763 m Verified	x: 0 m Verified	VERIFIED
V-299: C24 - C30	x: 4.5 m Verified	x: 2.6 m Verified	x: 2.6 m Verified	x: 2.6 m Verified	VERIFIED
Notation: $S_{F,top}$: Comprobación de la separación máxima entre armaduras: Top face $S_{F,Rgt.side}$: Comprobación de la separación máxima entre armaduras: Right side face $S_{F,bot.}$: Comprobación de la separación máxima entre armaduras: Bottom face $S_{F,Lft.side}$: Comprobación de la separación máxima entre armaduras: Left side face x: Distance to the origin of the bar η : Usage coefficient (%) D.N.P.: Not applicable					
Checks that do not proceed (D.N.P.): ⁽¹⁾ The check does not proceed, as there is no stressed reinforcement.					

Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-201: C25 - C26	$f_{A,max}$: 7.06 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-202: C26 - C27	$f_{A,max}$: 5.54 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-203: C27 - C28	$f_{A,max}$: 6.28 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-204: C28 - C29	$f_{A,max}$: 5.44 mm $f_{A,lim}$: 19.59 mm	VERIFIED



Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-205: C29 - C30	$f_{A,max}$: 7.64 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-206: A74 - C24	$f_{A,max}$: 0.01 mm $f_{A,lim}$: 2.61 mm	VERIFIED
V-207: C17 - C18	$f_{A,max}$: 1.21 mm $f_{A,lim}$: 9.48 mm	VERIFIED
V-208: C18 - C19	$f_{A,max}$: 0.73 mm $f_{A,lim}$: 9.48 mm	VERIFIED
V-209: C19 - A6	$f_{A,max}$: 0.12 mm $f_{A,lim}$: 5.99 mm	VERIFIED
V-210: A55 - C23	$f_{A,max}$: 0.25 mm $f_{A,lim}$: 7.71 mm	VERIFIED
V-211: C23 - A72	$f_{A,max}$: 0.43 mm $f_{A,lim}$: 8.02 mm	VERIFIED
V-212: A72 - A73	$f_{A,max}$: 0.05 mm $f_{A,lim}$: 6.46 mm	VERIFIED
V-213: A7 - C20	$f_{A,max}$: 0.36 mm $f_{A,lim}$: 8.49 mm	VERIFIED
V-214: C20 - C21	$f_{A,max}$: 0.74 mm $f_{A,lim}$: 9.45 mm	VERIFIED
V-215: C21 - C22	$f_{A,max}$: 0.75 mm $f_{A,lim}$: 9.58 mm	VERIFIED
V-216: C22 - A54	$f_{A,max}$: 0.36 mm $f_{A,lim}$: 8.62 mm	VERIFIED
V-217: A48 - A49	$f_{A,max}$: 0.12 mm $f_{A,lim}$: 6.34 mm	VERIFIED
V-218: A19 - A18	$f_{A,max}$: 0.01 mm $f_{A,lim}$: 2.92 mm	VERIFIED
V-219: A46 - A47	$f_{A,max}$: 6.03 mm $f_{A,lim}$: 19.30 mm	VERIFIED
V-220: A50 - A51	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.84 mm	VERIFIED
V-221: A16 - A17	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 3.17 mm	VERIFIED
V-222: A77 - A78	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 1.88 mm	VERIFIED
V-223: A78 - A79	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.40 mm	VERIFIED
V-224: C15 - C16	$f_{A,max}$: 10.01 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-225: A44 - A45	$f_{A,max}$: 6.16 mm $f_{A,lim}$: 19.34 mm	VERIFIED
V-226: A63 - A62	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 3.17 mm	VERIFIED
V-227: A21 - A20	$f_{A,max}$: 0.01 mm $f_{A,lim}$: 2.92 mm	VERIFIED
V-228: A14 - A15	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 3.17 mm	VERIFIED



Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-229: A60 - A61	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.84 mm	VERIFIED
V-230: A96 - A85	$f_{A,max}$: 0.15 mm $f_{A,lim}$: 6.68 mm	VERIFIED
V-231: A85 - A84	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.40 mm	VERIFIED
V-232: A88 - A89	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.82 mm	VERIFIED
V-233: C7 - C8	$f_{A,max}$: 1.02 mm $f_{A,lim}$: 9.48 mm	VERIFIED
V-234: C8 - C9	$f_{A,max}$: 0.52 mm $f_{A,lim}$: 9.48 mm	VERIFIED
V-235: C9 - A0	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 1.87 mm	VERIFIED
V-236: A71 - C13	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 6.61 mm	VERIFIED
V-237: C13 - A98	$f_{A,max}$: 0.23 mm $f_{A,lim}$: 7.68 mm	VERIFIED
V-238: A98 - C14	$f_{A,max}$: 0.05 mm $f_{A,lim}$: 2.95 mm	VERIFIED
V-239: A1 - C10	$f_{A,max}$: 0.33 mm $f_{A,lim}$: 8.99 mm	VERIFIED
V-240: C10 - C11	$f_{A,max}$: 0.58 mm $f_{A,lim}$: 9.48 mm	VERIFIED
V-241: C11 - C12	$f_{A,max}$: 0.61 mm $f_{A,lim}$: 9.48 mm	VERIFIED
V-242: C12 - A2	$f_{A,max}$: 0.33 mm $f_{A,lim}$: 9.06 mm	VERIFIED
V-243: C1 - C2	$f_{A,max}$: 3.44 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-244: C2 - C3	$f_{A,max}$: 2.14 mm $f_{A,lim}$: 19.18 mm	VERIFIED
V-245: C3 - C4	$f_{A,max}$: 2.43 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-246: C4 - C5	$f_{A,max}$: 2.34 mm $f_{A,lim}$: 19.72 mm	VERIFIED
V-247: C5 - C6	$f_{A,max}$: 2.94 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-248: C1 - C7	$f_{A,max}$: 3.26 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-249: C7 - C15	$f_{A,max}$: 1.07 mm $f_{A,lim}$: 18.75 mm	VERIFIED
V-250: C15 - C17	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 9.22 mm	VERIFIED
V-251: C17 - C25	$f_{A,max}$: 0.26 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-252: C8 - A5	$f_{A,max}$: 6.68 mm $f_{A,lim}$: 20.21 mm	VERIFIED



Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-253: A5 - C18	$f_{A,max}$: 6.69 mm $f_{A,lim}$: 20.21 mm	VERIFIED
V-254: C2 - C9	$f_{A,max}$: 9.47 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-255: C9 - C16	$f_{A,max}$: 0.14 mm $f_{A,lim}$: 3.91 mm	VERIFIED
V-256: C16 - C19	$f_{A,max}$: 0.35 mm $f_{A,lim}$: 9.16 mm	VERIFIED
V-257: C19 - C26	$f_{A,max}$: 0.88 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-258: A25 - A24	$f_{A,max}$: 0.10 mm $f_{A,lim}$: 4.27 mm	VERIFIED
V-259: A26 - A27	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 4.32 mm	VERIFIED
V-260: A28 - A29	$f_{A,max}$: 0.01 mm $f_{A,lim}$: 3.33 mm	VERIFIED
V-261: A30 - A31	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.18 mm	VERIFIED
V-262: A32 - A33	$f_{A,max}$: 0.18 mm $f_{A,lim}$: 4.19 mm	VERIFIED
V-263: A23 - A22	$f_{A,max}$: 0.26 mm $f_{A,lim}$: 4.27 mm	VERIFIED
V-264: A41 - A40	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 4.29 mm	VERIFIED
V-265: A38 - A39	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 3.33 mm	VERIFIED
V-266: A36 - A37	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 4.35 mm	VERIFIED
V-267: A34 - A35	$f_{A,max}$: 0.18 mm $f_{A,lim}$: 4.21 mm	VERIFIED
V-268: A92 - A93	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 4.54 mm	VERIFIED
V-269: A8 - C20	$f_{A,max}$: 0.06 mm $f_{A,lim}$: 3.02 mm	VERIFIED
V-270: C20 - C27	$f_{A,max}$: 1.10 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-271: C3 - C10	$f_{A,max}$: 10.89 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-272: C10 - A13	$f_{A,max}$: 0.80 mm $f_{A,lim}$: 6.04 mm	VERIFIED
V-273: A12 - A11	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.43 mm	VERIFIED
V-274: A11 - A10	$f_{A,max}$: 0.05 mm $f_{A,lim}$: 4.53 mm	VERIFIED
V-275: A10 - A9	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 2.71 mm	VERIFIED
V-276: C4 - C12	$f_{A,max}$: 10.76 mm $f_{A,lim}$: 19.79 mm	VERIFIED



Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-277: C12 - A43	$f_{A,max}$: 0.37 mm $f_{A,lim}$: 12.71 mm	VERIFIED
V-278: A43 - A42	$f_{A,max}$: 0.35 mm $f_{A,lim}$: 12.71 mm	VERIFIED
V-279: A42 - C22	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 2.80 mm	VERIFIED
V-280: C22 - C28	$f_{A,max}$: 1.07 mm $f_{A,lim}$: 9.38 mm	VERIFIED
V-281: A94 - A95	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 4.54 mm	VERIFIED
V-282: A57 - A56	$f_{A,max}$: 0.42 mm $f_{A,lim}$: 12.75 mm	VERIFIED
V-283: A58 - A59	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 3.33 mm	VERIFIED
V-284: A52 - A53	$f_{A,max}$: 0.06 mm $f_{A,lim}$: 6.36 mm	VERIFIED
V-285: A66 - A70	$f_{A,max}$: 0.03 mm $f_{A,lim}$: 2.76 mm	VERIFIED
V-286: A64 - A65	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 3.32 mm	VERIFIED
V-287: A69 - A68	$f_{A,max}$: 0.24 mm $f_{A,lim}$: 12.75 mm	VERIFIED
V-288: C5 - C13	$f_{A,max}$: 5.23 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-289: C13 - C23	$f_{A,max}$: 4.15 mm $f_{A,lim}$: 18.89 mm	VERIFIED
V-290: C23 - C29	$f_{A,max}$: 0.80 mm $f_{A,lim}$: 8.70 mm	VERIFIED
V-291: A97 - A76	$f_{A,max}$: 0.40 mm $f_{A,lim}$: 8.81 mm	VERIFIED
V-292: A76 - A75	$f_{A,max}$: 0.06 mm $f_{A,lim}$: 6.88 mm	VERIFIED
V-293: A90 - A91	$f_{A,max}$: 0.02 mm $f_{A,lim}$: 2.49 mm	VERIFIED
V-294: A83 - A82	$f_{A,max}$: 0.17 mm $f_{A,lim}$: 6.97 mm	VERIFIED
V-295: A87 - A80	$f_{A,max}$: 0.45 mm $f_{A,lim}$: 9.57 mm	VERIFIED
V-296: A80 - A81	$f_{A,max}$: 0.21 mm $f_{A,lim}$: 8.13 mm	VERIFIED
V-297: C6 - C14	$f_{A,max}$: 5.00 mm $f_{A,lim}$: 19.79 mm	VERIFIED
V-298: C14 - C24	$f_{A,max}$: 0.04 mm $f_{A,lim}$: 0.98 mm	VERIFIED
V-299: C24 - C30	$f_{A,max}$: 0.47 mm $f_{A,lim}$: 9.38 mm	VERIFIED



3.3.- Floor 6

Beams		RESISTANCE CHECKS (CIRSOC 201-2005)																		Status																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		Arrgmt.	Reinf.	Q	Q.S.	N.M	N.M.S.	T _r	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}		T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}	T _{se}

Beams	CHECK FOR CRACKING (CIRSOC 201-2005)				Status
	S _{F,top}	S _{F,Rgt.side}	S _{F,bot.}	S _{F,Lft.side}	
V-301: A3 - A2	x: 1.153 m Verified	x: 1.153 m Verified	x: 0.036 m Verified	x: 1.153 m Verified	VERIFIED
V-302: A8 - A4	x: 1.15 m Verified	x: 0.617 m Verified	x: 0.617 m Verified	x: 0.617 m Verified	VERIFIED
V-303: A0 - A1	x: 0 m Verified	x: 0 m Verified	x: 1.656 m Verified	x: 0 m Verified	VERIFIED
V-304: A7 - A6	x: 4.594 m Verified	x: 2.258 m Verified	x: 2.258 m Verified	x: 2.258 m Verified	VERIFIED
Notation: S _{F,top} : Comprobación de la separación máxima entre armaduras: Top face S _{F,Rgt.side} : Comprobación de la separación máxima entre armaduras: Right side face S _{F,bot.} : Comprobación de la separación máxima entre armaduras: Bottom face S _{F,Lft.side} : Comprobación de la separación máxima entre armaduras: Left side face x: Distance to the origin of the bar η: Usage coefficient (%)					

Deflection checks		
Beams	Active (Characteristic) $f_{A,max} \leq f_{A,lim}$ $f_{A,lim} = L/480$	Status
V-301: A3 - A2	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.40 mm	VERIFIED
V-302: A8 - A4	$f_{A,max}$: 0.00 mm $f_{A,lim}$: 2.40 mm	VERIFIED
V-303: A0 - A1	$f_{A,max}$: 0.04 mm $f_{A,lim}$: 6.97 mm	VERIFIED
V-304: A7 - A6	$f_{A,max}$: 0.15 mm $f_{A,lim}$: 9.57 mm	VERIFIED

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1.- PROGRAM VERSION AND LICENSE NUMBER

Version: 2015

License number: 50190

2.- GENERAL DATA OF THE STRUCTURE

Project: edificio 2.0

Keyword: edificio 2.0

3.- CODES CONSIDERED

Concrete: CIRSOC 201-2005

Cold-formed steel: AISI S100-2007 (LRFD)

Rolled and welded steel: ANSI/AISC 360-10 (LRFD)

Use category: General

4.- LOADS CONSIDERED

4.1.- Gravity loads

Floor	L.L. (kN/m ²)	Dead loads (kN/m ²)
Floor 6	1.0	0.1
techo	1.0	0.3
Floors 1 to 4	2.5	0.6
Foundations	0.0	0.0

4.2.- Wind

Reglamento Argentino de Acción del Viento sobre las Construcciones

Categoría de uso: II

Velocidad básica del viento: 45.0 m/s

Dirección X: Tipo de estructura C

Dirección Y: Tipo de estructura C

Categoría del terreno: Categoría B

Orografía del terreno: Llano

Tributary widths		
Floors	Y Tributary width (m)	X Tributary width (m)
Floor 6	2.30	5.50
Floor 1, Floor 2, Floor 3, Floor 4 and techo	25.00	50.00

The analysis of 2nd order effects is NOT carried out

Load Coefficients

+X: 1.00 -X:1.00

+Y: 1.00 -Y:1.00



Wind loads		
Floor	Wind X (kN)	Wind Y (kN)
Floor 6	2.171	5.987
techo	53.620	123.916
Floor 4	58.509	136.005
Floor 3	55.619	130.366
Floor 2	52.059	123.422
Floor 1	48.201	115.894

4.3.- Seismic

Design code used: CIRSOC 103-1991

Reglamento INPRES - CIRSOC 103 - Tomo I - 1991

Normas Argentinas para Construcción Sismorresistente

Calculation method: Análisis modal espectral (CIRSOC 103-1991, 14.2)

4.3.1.- Earthquake general data

Location characterisation

Capital (PROVINCIA DE CORDOBA)

Seismic zone (CIRSOC 103-1991, Capítulo 3): Peligrosidad sísmica reducida.

Tipo de terreno (CIRSOC 103-1991, 6.2): Tipo III (suelos blandos).

Structural system

μ_x : Global ductility (X) (CIRSOC 103-1991, 8.3)

μ_x : 3.50

μ_y : Global ductility (Y) (CIRSOC 103-1991, 8.3)

μ_y : 3.50

ξ : Damping (CIRSOC 103-1991, 12.3)

ξ : 5

Agrupamiento de la construcción según su destino (CIRSOC 103-1991, 5.1): Grupo B
(factor de riesgo = 1.0)

Analysis parameters

Number of vibration modes considered in the analysis: Based on the Code

Fraction of live load

: 0.25

Fraction of snow load

: 0.00

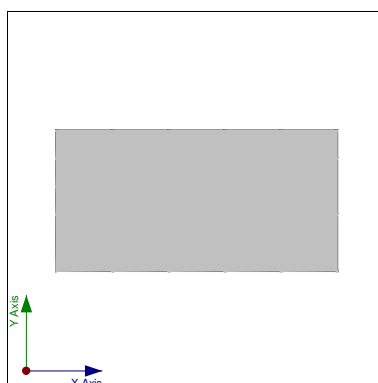
The analysis of 2nd order effects is not carried out

Reinforcement criteria to apply by ductility: None

Analysis directions

Seismic action in direction X

Seismic action in direction Y



On-plan projection of the job

4.4.- Loadcase

Automatic	Self weight Dead load Live load Earthquake X Earthquake Y Wind +X ecc.+ Wind +X ecc.- Wind -X ecc.+ Wind -X ecc.- Wind +Y ecc.+ Wind +Y ecc.- Wind -Y ecc.+ Wind -Y ecc.-
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4.5.- Loads on walls

4.6.- Load report

Special loads introduced (in kN, kN/m and kN/m²)

Group	Loadcase	Type	Value	Coordinates
1	Dead load	Line	3.00	(0.00, 0.00) (0.00, 10.00)
	Dead load	Line	3.00	(0.00, 10.00) (0.00, 15.00)
	Dead load	Line	3.00	(0.00, 15.00) (0.00, 20.00)
	Dead load	Line	3.00	(0.00, 20.00) (0.00, 25.00)
	Dead load	Line	3.00	(0.00, 25.00) (10.00, 25.00)
	Dead load	Line	3.00	(10.00, 25.00) (20.00, 25.00)
	Dead load	Line	3.00	(20.00, 25.00) (30.00, 25.00)
	Dead load	Line	3.00	(30.00, 25.00) (40.00, 25.00)
	Dead load	Line	3.00	(40.00, 25.00) (50.00, 25.00)
	Dead load	Line	3.00	(50.05, 20.00) (50.05, 25.00)
	Dead load	Line	3.00	(50.05, 10.00) (50.05, 20.00)
	Dead load	Line	3.00	(50.05, 0.00) (50.05, 10.00)
	Dead load	Line	3.00	(40.00, 0.00) (50.00, 0.00)
	Dead load	Line	3.00	(30.00, 0.00) (40.00, 0.00)
	Dead load	Line	3.00	(20.00, 0.00) (30.00, 0.00)
	Dead load	Line	3.00	(10.00, 0.00) (20.00, 0.00)



Group	Loadcase	Type	Value	Coordinates
	Dead load	Line	3.00	(0.00, 0.00) (10.00, 0.00)
	Dead load	Line	8.20	(20.00, 10.00) (15.34, 10.00)
	Dead load	Line	8.20	(20.00, 11.70) (20.00, 12.71)
	Dead load	Line	8.20	(17.48, 14.02) (19.00, 14.02)
	Dead load	Line	8.20	(17.19, 14.02) (17.19, 16.50)
	Dead load	Line	8.20	(19.00, 16.50) (17.48, 16.50)
	Dead load	Line	8.20	(20.00, 18.30) (20.00, 20.00)
	Dead load	Line	8.20	(20.00, 16.50) (20.00, 17.30)
	Dead load	Line	8.20	(15.35, 20.00) (20.00, 20.00)
	Dead load	Line	8.20	(14.93, 18.84) (14.93, 20.00)
	Dead load	Line	8.20	(14.93, 16.80) (14.93, 17.84)
	Dead load	Line	8.20	(14.93, 14.20) (14.93, 15.80)
	Dead load	Line	8.20	(14.93, 12.17) (14.93, 13.20)
	Dead load	Line	8.20	(14.93, 10.00) (14.93, 11.17)
	Dead load	Line	8.20	(14.93, 14.02) (16.48, 14.02)
	Dead load	Line	8.20	(14.93, 16.50) (16.48, 16.50)
	Dead load	Line	8.20	(32.76, 14.02) (32.76, 16.50)
	Dead load	Line	8.20	(32.49, 14.02) (30.97, 14.03)
	Dead load	Line	8.20	(32.49, 16.50) (30.97, 16.50)
	Dead load	Line	8.20	(30.00, 16.50) (30.00, 20.00)
	Dead load	Line	8.20	(34.68, 20.00) (30.00, 20.00)
	Dead load	Line	8.20	(35.00, 16.80) (35.00, 20.00)
	Dead load	Line	8.20	(35.90, 16.80) (35.90, 20.00)
	Dead load	Line	8.20	(35.90, 14.20) (35.90, 15.80)
	Dead load	Line	8.20	(35.90, 10.00) (35.90, 13.21)
	Dead load	Line	8.20	(35.00, 10.00) (35.00, 13.21)
	Dead load	Line	8.20	(34.68, 10.00) (30.00, 10.00)
	Dead load	Line	8.20	(33.49, 14.02) (35.00, 14.02)
	Dead load	Line	8.20	(35.00, 14.20) (35.00, 15.80)
	Dead load	Line	8.20	(33.49, 16.50) (35.00, 16.50)
	Dead load	Line	8.20	(44.25, 15.80) (44.25, 19.25)
	Dead load	Line	8.20	(44.25, 20.00) (47.50, 20.00)
	Dead load	Line	8.20	(45.15, 15.80) (46.20, 15.80)
	Dead load	Line	8.20	(46.20, 15.80) (47.50, 15.80)
	Dead load	Line	8.20	(46.20, 11.66) (46.20, 15.00)
	Dead load	Line	8.20	(46.20, 10.90) (47.50, 10.90)
	Dead load	Line	8.20	(48.50, 10.90) (50.05, 10.90)
	Dead load	Line	8.20	(46.20, 10.90) (44.30, 10.91)
	Dead load	Line	8.20	(44.30, 8.62) (44.30, 9.82)
2	Dead load	Surface	3.90	(50.00, 25.00) (40.00, 25.00) (40.00, 20.00) (44.25, 20.00) (47.50, 20.00) (48.50, 20.00) (50.00, 20.00)
	Dead load	Surface	3.90	(40.00, 20.00) (40.00, 25.00) (30.00, 25.00) (30.00, 20.00) (34.68, 20.00) (36.05, 20.00)



Group	Loadcase	Type	Value	Coordinates
	Dead load	Surface	3.90	(40.00, 10.00) (40.00, 20.00) (36.05, 20.00) (35.90, 20.00) (35.90, 16.80) (35.90, 15.80) (35.90, 14.20) (35.90, 13.21) (35.90, 10.00) (36.48, 10.00)
	Dead load	Surface	3.90	(35.90, 13.21) (35.90, 14.20) (35.90, 15.80) (35.90, 16.80) (35.90, 20.00) (35.00, 20.00) (35.00, 16.80) (35.00, 15.80) (35.00, 14.20) (35.00, 13.21) (35.00, 10.00) (35.90, 10.00)
	Dead load	Surface	3.90	(35.00, 13.21) (35.00, 14.02) (33.49, 14.02) (32.49, 14.02) (30.97, 14.03) (30.00, 14.03) (30.00, 10.00) (34.68, 10.00) (35.00, 10.00)
	Dead load	Surface	3.90	(35.00, 14.20) (35.00, 15.80) (35.00, 16.50) (33.49, 16.50) (32.77, 16.50) (32.77, 14.02) (33.49, 14.02) (35.00, 14.02)
	Dead load	Surface	3.90	(32.49, 16.50) (30.97, 16.50) (30.00, 16.50) (30.00, 14.03) (30.97, 14.03) (32.49, 14.02) (32.77, 14.02) (32.77, 16.50)
	Dead load	Surface	3.90	(33.49, 16.50) (35.00, 16.50) (35.00, 16.80) (35.00, 20.00) (34.68, 20.00) (30.00, 20.00) (30.00, 16.50) (30.97, 16.50) (32.49, 16.50) (32.77, 16.50)
	Dead load	Surface	3.90	(25.00, 10.00) (30.00, 10.00) (30.00, 14.03) (29.57, 14.03) (20.28, 14.02) (20.01, 14.02) (20.00, 12.71) (20.00, 11.70) (20.00, 10.00)
	Dead load	Surface	3.90	(30.00, 14.03) (30.00, 16.50) (29.55, 16.50) (20.28, 16.50) (20.00, 16.50) (20.01, 14.02) (20.28, 14.02) (29.57, 14.03)
	Dead load	Surface	3.90	(29.55, 16.50) (30.00, 16.50) (30.00, 20.00) (25.00, 20.00) (20.00, 20.00) (20.00, 18.30) (20.00, 17.30) (20.00, 16.50) (20.28, 16.50)
	Dead load	Surface	3.90	(25.00, 20.00) (30.00, 20.00) (30.00, 25.00) (20.00, 25.00) (20.00, 20.00)
	Dead load	Surface	3.90	(20.00, 20.00) (20.00, 25.00) (10.00, 25.00) (10.00, 20.00) (13.97, 20.00) (15.35, 20.00)
	Dead load	Surface	3.90	(20.00, 18.30) (20.00, 20.00) (15.35, 20.00) (14.93, 20.00) (14.93, 18.84) (14.93, 17.84) (14.93, 16.80) (14.93, 16.50) (16.48, 16.50) (17.48, 16.50) (19.00, 16.50) (20.00, 16.50) (20.00, 17.30)



Group	Loadcase	Type	Value	Coordinates
	Dead load	Surface	3.90	(19.00, 14.02) (20.01, 14.02) (20.00, 16.50) (19.00, 16.50) (17.48, 16.50) (17.26, 16.50) (17.26, 14.02) (17.48, 14.02)
	Dead load	Surface	3.90	(17.26, 14.02) (17.26, 16.50) (16.48, 16.50) (14.93, 16.50) (14.93, 15.80) (14.93, 14.20) (14.93, 14.02) (16.48, 14.02)
	Dead load	Surface	3.90	(20.00, 10.00) (20.00, 11.70) (20.00, 12.71) (20.01, 14.02) (19.00, 14.02) (17.48, 14.02) (16.48, 14.02) (14.93, 14.02) (14.93, 13.20) (14.93, 12.17) (14.93, 11.17) (14.93, 10.00) (15.34, 10.00)
	Dead load	Surface	3.90	(14.93, 11.17) (14.93, 12.17) (14.93, 13.20) (14.93, 14.20) (14.93, 15.80) (14.93, 16.80) (14.93, 17.84) (14.93, 18.84) (14.93, 20.00) (14.13, 20.00) (14.13, 18.84) (14.13, 17.84) (14.13, 16.80) (14.13, 15.80) (14.13, 14.20) (14.13, 13.21) (14.13, 12.17) (14.13, 11.17) (14.13, 10.00) (14.93, 10.00)
	Dead load	Surface	3.90	(14.13, 11.17) (14.13, 12.17) (14.13, 13.21) (14.13, 14.20) (14.13, 15.80) (14.13, 16.80) (14.13, 17.84) (14.13, 18.84) (14.13, 20.00) (13.97, 20.00) (10.00, 20.00) (10.00, 15.00) (10.00, 10.00) (13.97, 10.00) (14.13, 10.00)
	Dead load	Surface	3.90	(10.00, 15.00) (5.00, 15.00) (5.00, 10.00) (10.00, 10.00)
	Dead load	Surface	3.90	(0.00, 15.00) (0.00, 10.00) (5.00, 10.00) (5.00, 15.00)
	Dead load	Surface	3.90	(10.00, 15.00) (10.00, 20.00) (5.00, 20.00) (5.00, 15.00)
	Dead load	Surface	3.90	(5.00, 20.00) (0.00, 20.00) (0.00, 15.00) (5.00, 15.00)
	Dead load	Surface	3.90	(5.00, 20.00) (10.00, 20.00) (10.00, 25.00) (0.00, 25.00) (0.00, 20.00)
	Dead load	Surface	12.60	(47.50, 15.65) (47.50, 15.80) (46.35, 15.80) (46.35, 15.00) (46.20, 15.00) (46.20, 11.66) (46.35, 11.66) (46.35, 10.90) (47.50, 10.90) (47.50, 11.06) (48.33, 11.06) (48.33, 15.65)
	Dead load	Surface	3.90	(44.30, 11.42) (44.25, 15.80) (44.25, 19.25) (44.25, 20.00) (40.00, 20.00) (40.00, 10.00) (44.30, 10.00)



5.- LIMIT STATES

Fracture U.L.S. Concrete	CIRSOC 201-2005
Fracture U.L.S. Foundation concrete	Roof configuration: General
Displacements	Characteristic loads

6.- PROJECT SITUATIONS

The load combinations will be defined according to the following criteria for the different project situations:

- Situations persistent or transient

$$\sum_{j \geq 1} \gamma_{Gj} G_{kj} + \gamma_P P_k + \sum_{i \geq 1} \gamma_{Qi} Q_{ki}$$

- Situations seismic loading

$$\sum_{j \geq 1} \gamma_{Gj} G_{kj} + \gamma_P P_k + \gamma_{AE} A_E + \sum_{i \geq 1} \gamma_{Qi} Q_{ki}$$

- Where:

- G_k Permanent load
- P_k Prestressing action
- Q_k Variable load
- A_E Seismic load
- γ_G Permanent load partial safety factor
- γ_P Partial safety coefficient for prestressing action
- $\gamma_{Q,1}$ Main variable load partial safety factor
- $\gamma_{Q,i}$ Accompanying variable load partial safety factor
- γ_{AE} Seismic load partial safety factor

6.1.- Partial safety factors (γ) and combination factors (ψ)

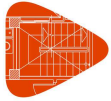
For each project situation and limit state, the loading coefficients will be determined by:

Fracture U.L.S. Concrete: CIRSOC 201-2005

Fracture U.L.S. Foundation concrete: CIRSOC 201-2005

(9-1)		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	1.400	1.400
Live load (Q)		
Wind (Q)		

(9-2)		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	1.200	1.200
Live load (Q)	0.000	1.600
Wind (Q)		



(9-3a)		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	1.200	1.200
Live load (Q)	0.000	0.500
Wind (Q)		

(9-3b)		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	1.200	1.200
Live load (Q)		
Wind (Q)	0.000	0.800

(9-4)		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	1.200	1.200
Live load (Q)	0.000	0.500
Wind (Q)	1.600	1.600

(9-5)		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	1.200	1.200
Live load (Q)	0.000	0.500
Wind (Q)		
Earthquake (E)	-1.000	1.000

(9-6)		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	0.900	0.900
Live load (Q)		
Wind (Q)	0.000	1.600

(9-7)		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	0.900	0.900
Live load (Q)		
Wind (Q)		
Earthquake (E)	-1.000	1.000



Displacements

Variable loads without seismic loading		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	1.000	1.000
Live load (Q)	0.000	1.000
Wind (Q)	0.000	1.000

Seismic loading		
	Partial safety factors (γ)	
	Favourable	Unfavourable
Dead load (G)	1.000	1.000
Live load (Q)	0.000	1.000
Wind (Q)		
Earthquake (E)	-1.000	1.000

6.2.- Combinations

▪ Loadcase names

SW	Self weight
DL	Dead load
Qa	Live load
W(+X ecc.+)	Wind +X ecc.+
W(+X ecc.-)	Wind +X ecc.-
W(-X ecc.+)	Wind -X ecc.+
W(-X ecc.-)	Wind -X ecc.-
W(+Y ecc.+)	Wind +Y ecc.+
W(+Y ecc.-)	Wind +Y ecc.-
W(-Y ecc.+)	Wind -Y ecc.+
W(-Y ecc.-)	Wind -Y ecc.-
SX	Earthquake X
SY	Earthquake Y

▪ Fracture U.L.S. Concrete

▪ Fracture U.L.S. Foundation concrete



Job data report

edificio 2.0

Date: 11/20/20

Comb.	SW	DL	Qa	W(+X ecc.+)	W(+X ecc.-)	W(-X ecc.+)	W(-X ecc.-)	W(+Y ecc.+)	W(+Y ecc.-)	W(-Y ecc.+)	W(-Y ecc.-)	SX	SY
1	1.400	1.400											
2	1.200	1.200											
3	1.200	1.200	1.600										
4	1.200	1.200		1.600									
5	1.200	1.200	0.500	1.600									
6	1.200	1.200			1.600								
7	1.200	1.200	0.500		1.600								
8	1.200	1.200				1.600							
9	1.200	1.200	0.500			1.600							
10	1.200	1.200					1.600						
11	1.200	1.200	0.500				1.600						
12	1.200	1.200						1.600					
13	1.200	1.200	0.500					1.600					
14	1.200	1.200							1.600				
15	1.200	1.200	0.500						1.600				
16	1.200	1.200								1.600			
17	1.200	1.200	0.500							1.600			
18	1.200	1.200									1.600		
19	1.200	1.200	0.500								1.600		
20	1.200	1.200										-1.000	
21	1.200	1.200	0.500									-1.000	
22	1.200	1.200										1.000	
23	1.200	1.200	0.500									1.000	
24	1.200	1.200											-1.000
25	1.200	1.200	0.500										-1.000
26	1.200	1.200											1.000
27	1.200	1.200	0.500										1.000
28	0.900	0.900											
29	0.900	0.900		1.600									
30	0.900	0.900			1.600								
31	0.900	0.900				1.600							
32	0.900	0.900					1.600						
33	0.900	0.900						1.600					
34	0.900	0.900							1.600				
35	0.900	0.900								1.600			
36	0.900	0.900									1.600		
37	0.900	0.900										-1.000	
38	0.900	0.900										1.000	
39	0.900	0.900											-1.000
40	0.900	0.900											1.000

Displacements

Comb.	SW	DL	Qa	W(+X ecc.+)	W(+X ecc.-)	W(-X ecc.+)	W(-X ecc.-)	W(+Y ecc.+)	W(+Y ecc.-)	W(-Y ecc.+)	W(-Y ecc.-)	SX	SY
1	1.000	1.000											
2	1.000	1.000	1.000										
3	1.000	1.000		1.000									
4	1.000	1.000	1.000	1.000									
5	1.000	1.000			1.000								
6	1.000	1.000	1.000		1.000								
7	1.000	1.000				1.000							
8	1.000	1.000	1.000			1.000							
9	1.000	1.000					1.000						
10	1.000	1.000	1.000				1.000						
11	1.000	1.000						1.000					
12	1.000	1.000	1.000					1.000					
13	1.000	1.000							1.000				
14	1.000	1.000	1.000						1.000				
15	1.000	1.000								1.000			
16	1.000	1.000	1.000							1.000			
17	1.000	1.000									1.000		
18	1.000	1.000	1.000								1.000		
19	1.000	1.000										-1.000	
20	1.000	1.000	1.000									-1.000	
21	1.000	1.000										1.000	
22	1.000	1.000	1.000									1.000	
23	1.000	1.000											-1.000
24	1.000	1.000	1.000										-1.000
25	1.000	1.000											1.000
26	1.000	1.000	1.000										1.000

7.- GEOMETRICAL DATA OF GROUPS AND FLOORS



Group	Group name	Floor	Floor name	Height	Elev
3	Floor 6	6	Floor 6	2.30	17.30
2	techo	5	techo	3.00	15.00
1	Floors 1 to 4	4	Floor 4	3.00	12.00
		3	Floor 3	3.00	9.00
		2	Floor 2	3.00	6.00
		1	Floor 1	3.00	3.00
0	Foundations				0.00

8.- GEOMETRICAL DATA OF COLUMNS, SHEAR WALLS AND WALLS

8.1.- Columns

IG: initial group

FG: final group

Ang: angle of the column in sexagesimal degrees

Column data

Reference	Coord(Fxd.Pt)	IG- FG	External fixity	Ang.	Fixed point	Depth of support
C1	(0.00, 0.00)	0-2	With external fixity	0.0	Centre	0.00
C2	(10.00, 0.00)	0-2	With external fixity	0.0	Centre	0.00
C3	(20.00, 0.00)	0-2	With external fixity	0.0	Centre	0.00
C4	(30.00, 0.00)	0-2	With external fixity	0.0	Centre	0.00
C5	(40.00, 0.00)	0-2	With external fixity	0.0	Centre	0.00
C6	(50.00, 0.00)	0-2	With external fixity	0.0	Centre	0.00
C7	(0.00, 10.00)	0-2	With external fixity	0.0	Centre	0.00
C8	(5.00, 10.00)	0-2	With external fixity	0.0	Centre	0.00
C9	(10.00, 10.00)	0-2	With external fixity	0.0	Centre	0.00
C10	(20.00, 10.00)	0-2	With external fixity	0.0	Centre	0.00
C11	(25.00, 10.00)	0-2	With external fixity	0.0	Centre	0.00
C12	(30.00, 10.00)	0-2	With external fixity	0.0	Centre	0.00
C13	(40.00, 10.00)	0-2	With external fixity	0.0	Centre	0.00
C14	(50.00, 10.00)	0-2	With external fixity	0.0	Centre	0.00
C15	(0.00, 15.00)	0-2	With external fixity	0.0	Centre	0.00
C16	(10.00, 15.00)	0-2	With external fixity	0.0	Centre	0.00
C17	(0.00, 20.00)	0-2	With external fixity	0.0	Centre	0.00
C18	(5.00, 20.00)	0-2	With external fixity	0.0	Centre	0.00
C19	(10.00, 20.00)	0-2	With external fixity	0.0	Centre	0.00
C20	(20.00, 20.00)	0-2	With external fixity	0.0	Centre	0.00
C21	(25.00, 20.00)	0-2	With external fixity	0.0	Centre	0.00
C22	(30.00, 20.00)	0-2	With external fixity	0.0	Centre	0.00
C23	(40.00, 20.00)	0-2	With external fixity	0.0	Centre	0.00
C24	(50.00, 20.00)	0-2	With external fixity	0.0	Centre	0.00
C25	(0.00, 25.00)	0-2	With external fixity	0.0	Centre	0.00
C26	(10.00, 25.00)	0-2	With external fixity	0.0	Centre	0.00
C27	(20.00, 25.00)	0-2	With external fixity	0.0	Centre	0.00
C28	(30.00, 25.00)	0-2	With external fixity	0.0	Centre	0.00
C29	(40.00, 25.00)	0-2	With external fixity	0.0	Centre	0.00



Reference	Coord(Fxd.Pt)	IG- FG	External fixity	Ang.	Fixed point	Depth of support
C30	(50.00, 25.00)	0-2	With external fixity	0.0	Centre	0.00

8.2.- Walls

- The coordinates of the initial and final vertices are absolute.
- The dimensions are stated in metres.

Geometric data of wall

Reference	Wall type	IG- FG	Vertices		Floor	Dimensions Left+Right=Total
			Initial	Final		
W1	Reinforced concrete wall	0-2	(13.97, 10.00) (15.34, 10.00)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W2	Reinforced concrete wall	0-2	(13.97, 20.00) (15.35, 20.00)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W3	Reinforced concrete wall	0-2	(14.13, 11.17) (14.13, 12.17)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W7	Reinforced concrete wall	0-2	(14.93, 11.17) (14.93, 12.17)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W8	Reinforced concrete wall	0-2	(14.93, 13.20) (14.93, 14.20)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W9	Reinforced concrete wall	0-2	(14.93, 15.80) (14.93, 16.80)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W10	Reinforced concrete wall	0-2	(14.93, 17.84) (14.93, 18.84)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W4	Reinforced concrete wall	0-2	(14.13, 13.21) (14.13, 14.20)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W5	Reinforced concrete wall	0-2	(14.13, 15.80) (14.13, 16.80)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3



Job data report

Reference	Wall type	IG- FG	Vertices		Floor	Dimensions Left+Right=Total
			Initial	Final		
W6	Reinforced concrete wall	0-2	(14.13, 17.84)	(14.13, 18.84)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W39	Reinforced concrete wall	0-2	(16.48, 14.02)	(17.48, 14.02)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W41	Reinforced concrete wall	0-2	(19.00, 16.50)	(20.28, 16.50)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W42	Reinforced concrete wall	0-2	(19.00, 14.02)	(20.28, 14.02)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W43	Reinforced concrete wall	0-2	(20.00, 17.30)	(20.00, 18.30)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W44	Reinforced concrete wall	0-2	(20.00, 11.70)	(20.00, 12.71)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W45	Reinforced concrete wall	0-2	(16.48, 16.50)	(17.48, 16.50)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W47	Reinforced concrete wall	0-2	(35.90, 13.21)	(35.90, 14.20)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W49	Reinforced concrete wall	0-2	(35.90, 15.80)	(35.90, 16.80)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W50	Reinforced concrete wall	0-2	(34.68, 20.00)	(36.05, 20.00)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W51	Reinforced concrete wall	0-2	(34.68, 10.00)	(36.48, 10.00)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3



Job data report

Reference	Wall type	IG- FG	Vertices		Floor	Dimensions Left+Right=Total
			Initial	Final		
W54	Reinforced concrete wall	0-2	(35.00, 13.21)	(35.00, 14.20)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W55	Reinforced concrete wall	0-2	(35.00, 15.80)	(35.00, 16.80)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W56	Reinforced concrete wall	0-2	(29.57, 14.03)	(30.97, 14.03)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W57	Reinforced concrete wall	0-2	(29.55, 16.50)	(30.97, 16.50)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W58	Reinforced concrete wall	0-2	(32.49, 16.50)	(33.49, 16.50)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W59	Reinforced concrete wall	0-2	(32.49, 14.02)	(33.49, 14.02)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W11	Reinforced concrete wall	0-2	(47.50, 20.00)	(48.50, 20.00)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W12	Reinforced concrete wall	0-2	(44.25, 19.25)	(44.25, 20.25)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W13	Reinforced concrete wall	0-2	(44.07, 15.80)	(45.15, 15.80)	5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3
W14	Reinforced concrete wall	0-3	(47.50, 15.80)	(48.50, 15.80)	6 5 4 3 2 1	0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3 0.15+0.15=0.3



Job data report

Reference	Wall type	IG- FG	Vertices		Floor	Dimensions Left+Right=Total
			Initial	Final		
W15	Reinforced concrete wall	0-3	(46.20, 15.00) (46.20, 16.00)		6	0.15+0.15=0.3
					5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W16	Reinforced concrete wall	0-3	(46.20, 10.55) (46.20, 11.66)		6	0.15+0.15=0.3
					5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W17	Reinforced concrete wall	0-3	(47.50, 10.90) (48.50, 10.90)		6	0.15+0.15=0.3
					5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W19	Reinforced concrete wall	0-2	(44.30, 9.82) (44.30, 11.42)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3
W20	Reinforced concrete wall	0-2	(44.30, 7.61) (44.30, 8.62)		5	0.15+0.15=0.3
					4	0.15+0.15=0.3
					3	0.15+0.15=0.3
					2	0.15+0.15=0.3
					1	0.15+0.15=0.3

Wall loads and footing

Reference	Pressures	Wall footing
W1	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W2	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W3	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W7	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W8	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W9	Left pressure: Without pressures Right pressure: Without pressures	With external fixity



Job data report

Reference	Pressures	Wall footing
W10	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W4	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W5	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W6	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W39	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W41	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W42	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W43	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W44	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W45	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W47	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W49	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W50	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W51	Left pressure: Without pressures Right pressure: Without pressures	With external fixity



Job data report

Reference	Pressures	Wall footing
W54	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W55	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W56	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W57	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W58	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W59	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W11	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W12	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W13	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W14	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W15	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W16	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W17	Left pressure: Without pressures Right pressure: Without pressures	With external fixity
W19	Left pressure: Without pressures Right pressure: Without pressures	With external fixity



Reference	Pressures	Wall footing
W20	Left pressure: Without pressures Right pressure: Without pressures	With external fixity

9.- DIMENSIONS, FIXITY AND BUCKLING COEFFICIENTS FOR EACH FLOOR

Column	Floor	Dimensions (cm)	Fixity coefficient		Buckling coefficient		Axial stiffness coefficient
			Head	Base	X	Y	
C1, C2, C3, C4, C5, C6, C7, C9, C10, C12, C13, C14, C15, C16, C17, C19, C20, C22, C23, C24, C25, C26, C27, C28, C29, C30	5	50x50	0.30	1.00	1.00	1.00	2.00
	4	50x50	1.00	1.00	1.00	1.00	2.00
	3	50x50	1.00	1.00	1.00	1.00	2.00
	2	50x50	1.00	1.00	1.00	1.00	2.00
	1	50x50	1.00	1.00	1.00	1.00	2.00
C8, C11, C18	5	40x30	0.30	1.00	1.00	1.00	2.00
	4	40x30	1.00	1.00	1.00	1.00	2.00
	3	40x30	1.00	1.00	1.00	1.00	2.00
	2	40x30	1.00	1.00	1.00	1.00	2.00
	1	40x30	1.00	1.00	1.00	1.00	2.00
C21	5	30x30	0.30	1.00	1.00	1.00	2.00
	4	30x30	1.00	1.00	1.00	1.00	2.00
	3	30x30	1.00	1.00	1.00	1.00	2.00
	2	30x30	1.00	1.00	1.00	1.00	2.00
	1	30x30	1.00	1.00	1.00	1.00	2.00

10.- PANEL REPORT

Waffle slabs considered

Name	Description
NEW	Lost form Nº of elements: 3 Self weight: 3.556 kN/m ² Depth: 30 cm Compression layer: 5 cm Rib spacing: 70 cm Rib width: 15 cm

11.- MATERIALS USED

11.1.- Concrete types

Element	Concrete	f_{ck} (MPa)	γ_c	Maximum size of the aggregate (mm)
Floor slabs	H-30	30	1.00	15
Columns and shear walls	H-20	20	1.00	15
Walls	H-20	20	1.00	15



11.2.- Steel types by element and position

11.2.1.- Steel in bars

Element	Steel	f_{yk} (MPa)	γ_s
All	ADN 420	420	1.00

11.2.2.- Steel in sections

Type of steel for sections	Steel	Yield Strength (MPa)	Modulus of Elasticity (GPa)
Cold formed steel	ASTM A 36 36 ksi	250	203
Rolled steel	ASTM A 36 36 ksi	250	200

Autores

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Tutores

-Ing. Marcos Fontana

-Ing. Facundo Ganancias

Trabajo Final:
Polo-
Tecnologico,
Master Plan

Universidad
Catolica de
Cordoba

FUNDACIONES

Project number 0001

Date 21/10/2020

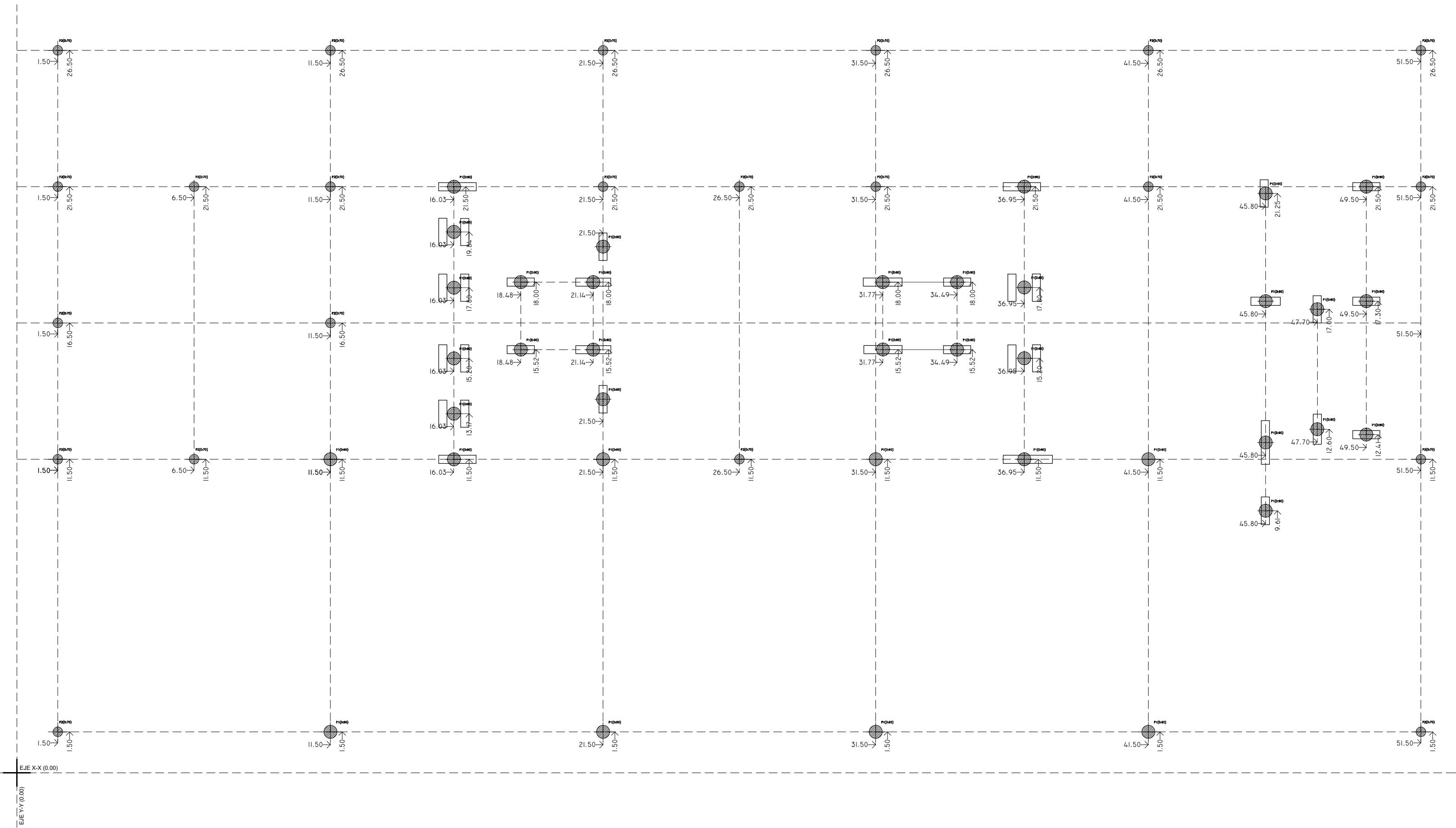
Drawn by

Checked by

A250

Scale 1 : 100 y 1:25

EJES DE REPLANTEO FUNDACIONES (POZOS) Esc: 1:100



CORTES DE CADA TIPO DE FUNDACIÓN Esc: 1:25

